

**ENVIRONMENTAL  
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**PHASE I ENVIRONMENTAL  
SITE ASSESSMENT**

at

**Elden Collections  
1551 East Orangethorpe Avenue  
Fullerton, California**

*EEC Job No. S1700.01*

March 22, 2006

For:

U.S. Bancorp  
633 West Fifth Street, 29<sup>th</sup> Floor  
Los Angeles, California 90071

By

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## EXECUTIVE SUMMARY

Environmental Engineering & Contracting, Inc. (EEC) has performed this Phase I Environmental-Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E 1527-00 and EEC's Standard Limitations for the Subject Property identified as Elden Collections, 1551 East Orangethorpe Avenue, Fullerton, California.

The pertinent information gathered during this investigation is summarized below:

- The Subject Property is located approximately 700 feet west of the intersection of South Acacia and East Orangethorpe Avenue. The Subject Property, constructed in the late-1950s or early 1960s, is developed with a 108,000 square foot (ft<sup>2</sup>), single story manufacturing/warehouse building with associated office space. The remainder of the Subject Property consists of asphalt-paved driveways and parking areas. Professionally landscaped areas are generally located along the site perimeter and throughout the parking areas.
- The Subject Property is currently occupied by Elden Collections, a furniture manufacturer. Elden onsite operations consist of construction, painting, and staining furniture. According to Ms. Jo Elliott (site contact and Elden employee), business activities of Elden Collections has been reduced by 75% and Elden Collections is in the planning to move to an undetermined location.
- Based on a review of available historical sources, it appears that the Subject Property was undeveloped or orchard lands from at least 1898 through the 1950s. The present day warehouse building was developed in the late 1950s. The site has been occupied by several industrial manufacturers over the years.
- The Subject Property is currently owned by Elden Collections, a furniture manufacturer. Elden's onsite operations have been recently reduced by 75%, and they are planning moving from this facility in the near future. Elden purchased the Subject Property from Red Eagle Properties in 1995. Red Eagle in turn bought the Subject Property from Resolution Trust Corporation (RTC) in May of 1994. The EDR city directory lists the Subject Property as Eye Encounter in 1991, however no additional information was found to confirm this business being present at the Subject Property. In the early 1990, Woodmill Products (Woodmill) leased the property. Woodmill manufactured picture frames and performed silk screening. From 1960 to 1985 the site was occupied by Arnold Engineering Company (Arnold). Arnold provided stamping and milling services to the electronics industry. Arnold used the following chemical onsite: ferric chloride, trichloroethane III, Chem-Strip 31817, and magnesium methyllate. Several metals including low-nickel, silicon steel, nickel and iron alloys, copper, and stainless steel were used at the Subject Property. Prior to 1960, the site was occupied by Ensign Carburetor Company/Butane and Propane Equipment Manufacturing.
- In September 1994 two clarifiers were removed from the site. During the removal of the clarifiers soil contamination was encountered. Subsequent site investigations identified the presence of hydrocarbon and chlorinated solvent compounds in the subsurface. Soil vapor extraction was initiated in 1994 to remediate the site. In 1995, the Orange County Health Care Agency (OCHCA) concluded that the site had been sufficiently remediated and granted site closure. Soil borings drilled at the conclusion of the remediation indicate that residual VOCs remained in the soil beneath the site. These VOCs included TCE at a concentration of 180 parts per million (ppm) at 105 feet bgs, just above the groundwater level. Records reviewed by EEC indicate that although site closure had been granted by the OCHCA, the RWQCB initially felt that additional assessment was required. The RWQCB later rescinded that recommendation when the current property owner explained that any contamination at the site was from a previous tenant. No groundwater samples have been collected beneath the site, even though VOC impacted soil extends very close to the regional groundwater level.

- The site is located within an area that is underlain by an extensive regional VOC plume in groundwater. This VOC plume has been the subject of intensive investigation and remediation. The primary investigative agency has been the Orange County Water District (OCWD), the purveyor of domestic water in Orange County. Through several investigations, the OCWD identified several Potentially Responsible Parties (PRP's) that they suspect may have contributed to the VOC plume. The Fullerton Business Park was one of the PRPs identified. The OCWD has reportedly filed a lawsuit naming the identified PRPs as defendants, apparently in an attempt to develop funding to assist in the remediation of the regional groundwater plume.
- Groundwater is located approximately 110 feet below ground surface (bgs) and flows to the west-southwest.
- The Subject Property is listed on several government databases that indicate that the site formerly contained a clarifier. EEC could not find any evidence that USTs were ever located onsite; therefore, it is likely that this reference refers to the previously removed clarifiers. These databases also list the site as being monitored for emission releases and as a hazardous waste generator.
- The following observations were made during EEC's site reconnaissance:
  - No visual evidence indicating the present use of USTs containing hydrocarbon products, such as vent pipes, manhole covers, or concrete cuts was identified at the Subject Property.
  - No visual evidence of past or present aboveground storage tanks (ASTs) was observed at the Subject Property.
  - Hazardous materials or hazardous waste including paints, lacquers, and stains are currently stored or used at the Subject Property. These materials appear to be stored properly at the Subject Property.
  - Minor staining was noted in the asphalt-paved parking lot; however, this staining appears to represent de-minimus risk to the environment.
- The results of the EDR radius search did not identify any sites in the vicinity of the Subject Property that would be a potential environmental concern.
- Several Air Quality Management District (AQMD) Violation were found related to the Subject Property. These violations do not appear to pose any environmental threat to the Subject Property.
- On April 10, 1992, Converse Environmental performed an asbestos inspection survey at 1501 -1561 East Orangethorpe Avenue, Fullerton, California. Both friable and nonfriable asbestos was detected at the Subject Property.

Two Recognized Environmental Conditions (RECs) were determined to be associated with the Subject Property. The term "recognized environmental condition" is defined by ASTM as the "presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

- Without further information that excludes the Subject Property, the pending lawsuit with the OCWD is considered a REC at the Subject Property. This lawsuit is due to the fact that both soil and groundwater beneath the site are known to be impacted by VOCs. If discharges from the Subject

Property are tied to the regional VOC plume it is possible that a new property owner could become liable for a costly remediation. EEC recommends consulting with an environmental attorney to assess how this risk could be mitigated.

- Residual concentrations of VOCs remain in soil beneath the site and extend to near the groundwater surface (110 feet bgs). Additionally, subsurface investigations conducted at the site appear to have been intentionally stopped short of collecting groundwater samples. Correspondences with the RWQCB indicate that the decision not to pursue assessment of groundwater was not for technical reasons, but was instead due to the fact that the current owner was not the source of the impact. Therefore, EEC believes that the site assessment activities have not fully characterized the extent of the impact, and that the site may have been prematurely closed. If the former property owner or tenant responsible for the release of VOCs cannot be identified or does not have sufficient monetary resources, the current property owner could be held liable for future investigative or remediation efforts.

One Historic Recognized Environmental Condition (HREC) was determined to be associated with the Subject Property. The term "historic recognized environmental condition" is defined in ASTM Practice E 1527-00 as "conditions which in the past would have been considered a REC, but which may or may not be considered a REC currently."

In September 1994 two clarifiers were removed from the Subject Site. Soil contamination was encountered beneath the clarifiers and continues to be a potential issue at the site, as described in the REC, above.

Environmental Engineering & Contracting, Inc. (EEC) has performed this Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E 1527-00 and EEC's Standard Limitations for the Subject Property identified as Elden Collections, 1551 East Orangethorpe Avenue, Fullerton, California.

Based on the observations and records reviewed during this Phase I ESA, EEC believes that historic onsite activities have adversely affected the subsurface soil and groundwater at the Subject Property. Additionally, the Subject Property is currently being named in a lawsuit with the OCWD, therefore, the property owner and lender must determine how this lawsuit could potentially impact each party. EEC recommends that legal council review any sales agreement prior to completing the site purchase.



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Appendix B - Site Photographs

Appendix C – Asbestos Inspection Report.

Appendix D - Environmental Questionnaire

Appendix E – Previous Environmental Reports

Appendix F – Sections of the Geosystem report

Appendix G - EDR Aerial Photographs

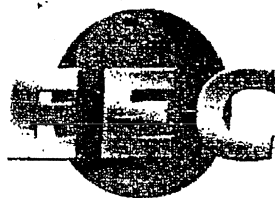
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**REPORT  
PHASE I ENVIRONMENTAL SITE ASSESSMENT  
Elden Collections  
1551 East Orangethorpe Avenue  
Fullerton, California**

## **1.0 INTRODUCTION**

This report presents the results of a Phase I Environmental Site Assessment (ESA) performed by Environmental Engineering & Contracting, Inc. (EEC), on behalf of U.S. Bancorp (US Bank), at 1551 East Orangethorpe Avenue, Fullerton, California (Subject Property). The Subject Property is developed with a 108,000 square foot (ft<sup>2</sup>) single story warehouse building, located approximately 700 feet west of the intersection of South Acacia and East Orangethorpe Avenue (Figure 1). The site vicinity contains a mix of commercial and industrial properties.

## **2.0 PURPOSE AND SCOPE OF SERVICES**

The purpose of this ESA is to review past and present land use practices, site operations, and applicable regulatory permits, to evaluate the potential presence of hazardous substances at the Subject Property and to satisfy one of the requirements to qualify for the "innocent landowner defense" as set forth by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

This ESA was performed in accordance with the guidelines set forth by the ASTM document E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The ESA included a site reconnaissance, drive-by survey of the site vicinity, and a review of available documentation to assess the presence and/or potential threat of recognized environmental conditions. The term "recognized environmental condition" is defined by ASTM as the "presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

### **2.1 Limitations**

The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity and our interpretation of the available historical information and documents reviewed, as described in this report. They are intended exclusively for the purpose outlined herein and at the site location and project indicated. The opinions and recommendations presented herein apply to past and present site conditions and are not applicable to future conditions or events.

In accordance with ASTM E 1527-00, Section 7.3 Historical Use Information, all obvious uses of the property shall be identified from the present, back to the property's first obvious developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the historical sources as are necessary and both reasonably ascertainable and likely to be useful. Historical sources could potentially include aerial photographs, fire insurance maps, property tax files, recorded land title records, 7.5 minute topographic maps,

local city directories, a title search, building department records, and zoning and land use records. EEC did not conduct reviews of the property tax files in this ESA because this information typically provides only information related to ownership of the property and not the actual use of the Subject Property.

This ESA did not include an evaluation for the potential presence of lead based paint, lead in drinking water, asbestos containing materials, or radon gas at the Subject Property. EEC's Standard Limitations can be found in Appendix A.

### **3.0 SITE DESCRIPTION**

#### **3.1 Site Description**

The Subject Property is located approximately 700 feet west of the intersection of South Acacia and East Orangethorpe Avenue in Fullerton, California. The Subject Property is developed with a 108,000-ft<sup>2</sup>, single story manufacturing/warehouse building with associated office space constructed in the late 1950s. The remainder of the Subject Property consists of asphalt-paved driveways and parking areas. Professionally landscaped areas are generally located along the site perimeter and throughout the parking areas.

The Subject Property is currently occupied by Elden Collections (Elden), a furniture manufacturer. Elden onsite operations consist of construction, painting, and staining furniture. According to Ms. Jo Elliott (site contact and Elden employee), business activities of Elden Collections has been reduced by 75% and Elden Collections is in the planning to move to an undetermined location.

#### **3.2 Physiography**

The most recent topographic map coverage of the site vicinity is provided by the USGS 7.5 minute, Anaheim, California quadrangle map, dated 1978 and photo revised in 1981 (Figure-1). According to the USGS topographic map, the Subject Property is located at an elevation of approximately 177 feet above mean sea level. In the site vicinity, topography slopes gently to the south-southwest. The Santa Ana River is located 2.75 miles to the southeast.

#### **3.3 Geologic and Hydrogeologic Setting**

##### **3.3.1 Site Geology**

The Subject Property is located within the Peninsular Ranges Geomorphic Province. The Peninsular Range is dominated by northwest-southeast trending blocks separated by similar trending strike-slip faults. The Los Angeles Basin is approximately 50 miles long and 20 miles wide and is located within the Peninsular Range Province. The Basin contains approximately 14,000 feet of marine and continental rocks of Miocene to early Pleistocene age. These rocks are overlain by unconsolidated and semi-consolidated Quaternary marine and continental sediments.

Based on EEC's experience at a nearby site, the site geology in the upper 200 feet is comprised of unconsolidated alluvial sediments. In general, above approximately 70-feet bgs, the alluvium is predominately comprised of poorly graded sand with interbedded well graded silty sand. Silts and clayey sands are interbedded with the sand in the upper 20-feet.

Regionally the 70- to 100-foot interval is characterized as an aquitard. However, locally water-bearing zones are present and the shallow wells at the site are screened in these zones. Between approximately 70 feet bgs and 100 feet bgs the formation is comprised of interbedded clay, sandy clay, clayey silts and silty sands.

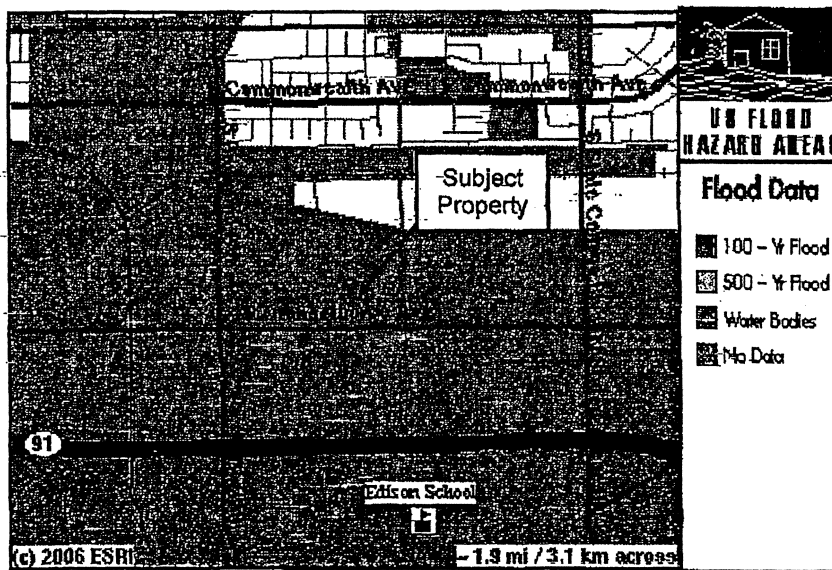
Below approximately 107 to 112 feet bgs the formation is comprised of saturated, poorly to well graded sand, with occasional interbedded gravelly sand. From 107 to 200 feet bgs, the formation consists primarily of poorly graded sand.

### 3.3.2 Site Hydrogeology.

The site is located within the Forebay portion of the Orange County Groundwater Basin. The uppermost regional aquifer beneath the site is termed the Upper Aquifer. Locally, small discontinuous perched groundwater zones are occasionally encountered above the Upper Aquifer. In the vicinity of the site, these perched aquifers contain no significant source of useable groundwater. The groundwater flow in the upper portion of the Upper Aquifer is documented by a network of groundwater monitoring wells maintained and sampled by the OCWD. The upper portion of the Upper Aquifer occurs at 110 to 130 feet bgs. Groundwater flow in the site vicinity is generally to the west-southwest except near the Fullerton Wellfield where groundwater extraction disrupts normal flow patterns.

### 3.4 Flood Zone

According to information provided on the Federal Emergency Management Agency's (FEMA) website, the Subject Property is located outside the 100-year flood hazard zone (FEMA Flood Insurance Rate Map 0606720313H dated February 18, 2004, Digital Q3 Flood Data-Files, GDT/Dynamap/2000 Data Set).



### 3.5 Site Inspection

On March 1, 2006, EEC conducted a site reconnaissance of the Subject Property and surrounding area to review current site conditions and activities. EEC looked for visible evidence suggesting the possible past use or disposal of hazardous materials at the Subject Property and adjacent properties. The reconnaissance included observations of existing site conditions and a perimeter survey from public-right-of-ways. Photographs of the Subject Property and site vicinity are included in Appendix B.

### 3.5.1 Use of Hazardous Substances

Hazardous materials such as paints, stains, lacquers, paint thinners, and acetone were observed throughout the Subject Property. The size of these containers ranged from 12 ounce aerosol cans to 55-gallon drums. Most 5-gallon and 55-gallon containers were stored within the flammable storage room located on the western side of the building. A finishing room, which contained 6 paint booths, is also located on the western side of the building. Several 55-gallon drums and cans of paint, lacquer and stains are stored adjacent to the paint booths. No hazardous waste is reportedly generated at the Subject Property.

### 3.5.2 Hazardous Substance Containers

#### Underground Storage Tanks

No visual evidence of past or present underground storage tanks (USTs) was observed at the Subject Property.

#### Above Ground Storage Tanks

No visual evidence of past or present aboveground storage tanks (ASTs) was observed at the Subject Property.

#### Clarifiers

No clarifiers were observed at the Subject Property; however, two clarifiers were removed from the Subject Property in 1994. The removal of the two clarifiers is further discussed in Section 3.8.

An oil/water separator was observed connected to the air compressors located outside the western side of the building. Heavy surficial oil staining was noted on the concrete pavement in the vicinity of the oil/water separator and air compressors. The oil/water separator is used to collect oil/water mixed waste from the air compressors. Based on the surficial nature, oil staining is not considered to be of environmental concern to the Subject Property.

#### Sumps

No visual evidence indicating past or present sumps was identified at the Subject Property.

#### Paint Booths

Six paint booths were observed at the Subject Property, and appear to be in good condition; however permits for only four paint booths were found at the City of Fullerton.

### 3.5.3 Waste Management and Disposal

#### Hazardous Waste Disposal

Hazardous materials or hazardous waste including paints, lacquers, and stains are currently stored or used at the Subject Property. These materials appear to properly stored and maintained.

#### Non-Hazardous Waste Disposal

General refuse was observed within dumpsters located along the eastern side of the Subject Property. General refuse is removed by contracted waste hauler.

#### Wastewater Disposal

No wastewater is reportedly generated at the Subject Property.

### 3.5.4 Stained Soil or Pavement

Heavy surficial oil staining was noted on the concrete pavement in the vicinity of the oil/water separator and air compressors located on the western side of the building. In addition, minor staining was observed in the parking lot at the Subject Property. Based on the surficial nature of the staining and the nature of the source,

the oil staining observed throughout the Subject Property is not considered to be of environmental concern.

### **3.5.5 Stressed Vegetation**

No areas of dead or dying vegetation indicating the release of hazardous substances was observed at the Subject Property during the site visit.

### **3.5.6 Polychlorinated Biphenyls**

Prior to 1978, polychlorinated biphenyls (PCBs) were commonly used in electrical transformers, hydraulic fluids, and electrical equipment such as fluorescent light ballasts. PCBs are stable compounds that persist in the environment after a spill or improper disposal. They have also been determined to be carcinogenic substances. Due to the demonstrated toxicity and persistence in the environment, PCB manufacturing in the United States was discontinued.

A pad-mounted transformer was observed near the northwest corner of the Subject Property. No significant signs of staining or leakage were noted in the vicinity of the transformer. In the event of a release, any cleanup will be responsibility of Southern California Edison (SCE), the owner and operator of the transformer. As such, this transformer is not considered to be of environmental concern to the Subject Property.

### **3.5.7 Lead Based Paint**

A lead-based paint survey was not conducted as a component of this assessment.

### **3.5.8 Asbestos**

Asbestos is a naturally occurring fibrous mineral that was extensively used in the past for its insulation properties. Asbestos fibers can be found in thermal insulation, fire-proofing material, vinyl floor tiles, mastic, wallboard, ceiling tiles, roofing material and numerous other materials. After asbestos was determined to be carcinogenic, its use was severely restricted in the late 1970's. Building materials are classified as Asbestos-Containing Material (ACM) if they contain greater than 1% asbestos fibers. Such material is considered a hazardous material and must be properly disposed of when removed or managed under an operations and maintenance plan. Definitive conclusion as to the presence or absence of ACMs at the Subject Property cannot be made without obtaining and analyzing samples of representative or suspect building materials for the presence of asbestos.

On April 10, 1992, Converse Environmental performed an asbestos inspection survey at 1501 - 1561 East Orangethorpe Avenue, Fullerton, California. Both friable and nonfriable asbestos was detected at the Subject Property. A complete copy of the report is presented in Appendix C.

### **3.5.9 Radon**

Radon is an odorless, radioactive gas that occurs naturally in soil, rock, and building materials. It results from the natural radioactive decay of radium and uranium. In outdoor air, radon is generally diluted to such low concentrations that it is usually not of concern. In enclosed spaces such as homes, offices, and basements, radon can accumulate and pose an environmental concern. Indoor levels of radon depend on a building's construction and the concentration of radon in the underlying soil and rock.

The Subject Property is located within Orange County, California, which has been designated by the U.S. Environmental Protection Agency (EPA) as Radon Zone 3. Zone 3 is designated as having an indoor average level of less than 2 picocuries per liter (pCi/L). The EPA has set a standard of 4.0 pCi/l as the concentration of

radon at which corrective action is recommended. Based on the location of the Subject Property, elevated levels of radon are not expected to be of concern.

### 3.5.10 Wells

The EDR Report indicates that no groundwater production wells are located within 1/4 mile of the Subject Property. However, based on maps of the VOC plume, a groundwater monitoring well appears to have been installed within the business park between 2000 and 2004. This well contains elevated concentrations of VOCs. Additionally, several groundwater monitoring wells are located adjacent and in the vicinity of the Subject Property. These monitoring wells also contain elevated concentrations of VOCs..

### 3.6 Surrounding Land Uses

A visual examination of the surrounding area was conducted in conjunction with the site inspection. Observations of surrounding properties were limited to accessible public areas and areas that could be readily observed from the Subject Property.

The following businesses are found in the direct vicinity of the Subject Property:

North: **Johnson Controls Inc. Globe Battery Div.**  
1550 Kimberly Ave

West and southwest (multi-tenant buildings):

**Grinnell Fire Protection**

1521 E Orangethorpe Ave

**Lucent Technologies**

1521 E Orangethorpe Ave

**Seekers Chapel**

1521 E Orangethorpe Ave

**QCM Incorporated**

1521 E Orangethorpe Ave

**Intsys Corporation**

1521 E Orangethorpe Ave, Ste 3665

**Image Ink Jet Printing Corporation**

1521 E Orangethorpe Ave, # 65

**Automatic Sprinkler Corporation**

1521 E Orangethorpe Ave, Ste 3093

**Henry Brother Electronics Incorporated**

1511 E Orangethorpe Ave

**Poly Mark**

1511 E Orangethorpe Ave

**U S Tech Recreational Products**

1511 E Orangethorpe Ave, # 8009

**Mba Graphics**

1511 E Orangethorpe Ave

**Paper Solutions Ink**

1511 E Orangethorpe Ave



South: **The Lion Company**  
1561 E Orangethorpe Ave, # 1000  
**Trans Union LLC**  
1561 E Orangethorpe Ave  
**Sierra Cybernetics**  
1561 E Orangethorpe Ave

East: unidentified commercial/industrial building. (the 1996 ESA Update report lists this building as Jonathan Manufacturing).

### **3.7 Interviews**

A questionnaire was given to Ms. Jo Elliott, of Elden Collections, as part of this Phase I ESA. Ms. Elliott had no knowledge of environmental issues at the Subject Property. Ms. Elliott assured EEC she would give the questionnaire to Mr. Needles, the property owner, to complete. A copy of the questionnaire will be included as Appendix D of this report, once it has been received.

Mr. Pravin Mody of GBS Linen, the potential buyer was also interviewed by EEC. Mr. Mody had knowledge of the environmental activities that had been performed at the Subject Property. Mr. Mody gave EEC copies of the pertinent reports for the Subject Property.

### **3.8 Previous Environmental Reports**

The follow section provides a brief description of previous environmental reports prepared for the Subject Property. The report summaries were originally prepared by Bryant Geoenvironmental Services in a Phase I ESA Update, dated August 12, 1996 and have been updated by EEC for this report. All previous reports are included in Appendix E.

A Phase I ESA and a Comprehensive Asbestos Survey were performed by BEM-Systems, Inc. (BEM) for AMRESKO, Inc. in 1992. The property assessed by BEM was identified as Fullerton Business Park North at 1501-1561 East Orangethorpe Avenue in Fullerton, which included the Subject Property, however the Subject Property was excluded from the asbestos survey. Converse Environmental West (Converse) also conducted a Phase I ESA of this business park in 1992 for Asset Management Resolution Company. Numerous other reports were prepared by Converse, including an Update to the Phase I ESA in 1994, that included several site characterization reports, and a Soil Remediation Closure Report dated December 12, 1995. Information previously gathered by BEM and Converse regarding prior ownership or historical use of the Property was judged to be adequate for the Phase I updated conducted in 1994.

The BEM Phase I ESA conducted in 1992 indicates that the Subject Property was not a listed/regulated facility. However, the most recent tenant at the time of the ESA, (Woodmill Products, Inc.) occupying "Building 1551" was reportedly a wood finisher, and used paint, wood finish, thinners, and solvents. Previous users included a manufacturer of butane and propane equipment, and a stamper and miller of electronics equipment. As noted by BEM and Converse, a "pit" and a "clarifier" were identified near this building. Various containers of paints, lacquers, lube oil, and thinners were discovered at this facility by BEM and Converse, as well as numerous empty 55-gallon drums. Although some damaged asphalt was found next to the clarifier, no obvious stained areas or evidence of past spillage were reported by the consultants. However, Converse reported that a "spill of a sludge containing iron, nickel, and copper" occurred at the Woodmill facility in 1985. Cleanup documents were not found by Converse nor by EEC during our review of documents.

In September 1994, two clarifiers were reportedly removed from the Subject Property. Two soil samples were collected from the bottom of the excavations. One sample revealed 16 parts per million (ppm) Total Recoverable Petroleum Hydrocarbons (TRPH), and the other sample revealed 27,000 parts-per billion (ppb) PCE and 3,600 ppm TRPH. Converse drilled one boring and found maximum concentrations of PCE at 38 ppb (30 feet) and of TRPH at 12 ppm (40 feet). The boring was terminated at 40.5 feet. Converse concluded that "it does not appear that serious contamination of the soil from PCE or TRPH exists and they recommended site closure.

Subsequent to the removal of the clarifiers, several additional phases of site investigations were completed by Converse. As summarized by Converse, seven borings were advanced using a Geoprobe in December 1994. Relatively high PCE concentrations (96,000 ppb) were found in one boring near the former clarifier. In January 1995, an additional nine borings were advanced to maximum depths of 40 feet below ground surface (bgs). Significant concentrations of PCE were reportedly encountered to depths of 35 feet. The highest concentrations were found in soil samples from depths of 20 to 30 feet. There was no discussion of other VOCs, which may have been detected.

In March 1995, Converse drilled two more borings (BH-14 and BH-15) to depths of 115 feet. Converse encountered groundwater at about 115 feet below grade in both borings. It was believed that this represents the Talbert Aquifer, a source of production/drinking water for Orange County. A perched zone was encountered at about 60 feet below grade. More importantly, Converse concluded that "groundwater beneath the site has not been impacted by a release of PCE from the former clarifier, and the base of the PCE-impacted soil is defined at about 60 feet below grade". PCE was not detected in samples collected below 65 feet (i.e., 70 to 105 feet). However, there was no discussion regarding other VOCs detected in samples, particularly TCE which was found in samples collected at 105 feet in both borings at concentrations of 180 ppb and 160 ppb. It should be noted that TCE is a degradation product of PCE. Although groundwater was encountered at 110 feet bgs, no groundwater samples were collected.

According to Converse, the Orange County Health Care Agency, expressed concern that the PCE concentrations identified in the subsurface represent a potential "public health excess lifetime cancer risk", based on a simplified vapor diffusion model. As a result of this concern, Converse installed and operated a soil vapor extraction and treatment system (VES), in accordance with an approved OCHCA work plan dated July 26, 1995. This VES was reportedly operated from August 15, 1995 until November 27, 1995. Because of the apparent effectiveness of the VES, it was shut down on November 10, 1995. On November 27, 1995, Converse restarted the system, and collected confirmation VOC measurements. Based on decreasing levels of VOCs detected between November 10 and 27, 1995, Converse stated that it appeared that "the remedial efforts had reduced the identified soil contaminants."

To verify the apparent effectiveness of the VES, Converse advanced three soil probes in the impacted area using a Geoprobe soil sampling rig. The probes were reportedly positioned next to previous borings BH-5, BH-8, and BH-9. Soil samples were collected at 5-foot intervals to the total depths drilled between 25 and 40 feet. PCE concentrations were found in the soil samples ranging from 0.3 to 25.3 ppm (25,300 ppb). Lower concentrations of other VOCs (i.e., TCE) were also reportedly detected between depths of 15 and 30 feet. Converse concluded that "PCE concentrations have been significantly reduced by the remediation system from 84.5 to 0.33 ppm (15 feet bgs), from 96 to 12.8 ppm (20 feet bgs), and from 88 to 13.7 ppm (25 feet bgs). Further, Converse requested that the recent analytical data be evaluated in accordance with the "simplified vapor diffusion model". If the model results were found to be favorable, Converse/Red Eagle Properties would request site closure from OCHCA.

On December 11, 1995, the RWQCB issued a letter to Red Eagle Properties regarding a meeting held on November 1, 1995. As a result of previous investigations, the RWQCB had originally requested that a groundwater investigation be conducted, including the installation of monitoring wells. However, due to the ownership history and the fact that the source of the problem was a previous tenant, not Red Eagle Properties, and due to the remedial efforts implemented by Red Eagle Properties, the RWQCB withdrew its request for a groundwater investigation. Red Eagle Properties and their consultant, Converse, also stated that further groundwater assessment was most likely not required for several reasons. These reasons include: a documented VOC plume upgradient of the site, the depth to groundwater and its potential uses; and the corrective measures already accomplished.

On December 15, 1995, the Orange County Health Care Agency issued a closure letter to Red Eagle Properties (Appendix E). As stated in this closure letter, on-site remedial action was confirmed and "no further action is required at this time". It should be pointed out that this "closure" was based on several factors. For example, the agency issued this closure letter based on an evaluation of the "health threat" and on the current use of the property. Further, this closure letter acknowledged that no groundwater investigation would be required at this time.

On August 12, 1996, Bryant GeoEnvironmental Services issued a Phase I ESA update report for the Subject Property. The report described site conditions and provided a summary of former environmental activities performed at the Subject Property, and concluded that no further action was required at that time.

On September 20, 2000, Geosystem Consultants, Inc. (Geosystems) issued a report titled "Focused Feasibility Study Report for the Orange County Water District Forebay VOC Project". This report states that a large area in the Anaheim/Fulleton area of Orange County, California has been impacted by VOC compounds, causing several production well, owned by the OCWD to be removed from service. The contamination is believed to have been released from a dozen or more industrial facilities overlying the impacted area. The Subject Property is listed as one of these sites. This report outlines possible remediation methods for the contaminate plume and presents evidence to why the associated industrial site is listed as a potentially responsible parties (PRPs). Pertinent pages from this report, documenting the Subject Property as one of the PRPs, have been included in Appendix F.

### **3.9 Other Potential Environmental Concerns**

The Fullerton Business Park is located within an area that is underlain by an extensive regional VOC plume in groundwater. This VOC plume has been the subject to intensive investigation and remediation. The primary investigative agency has been the Orange County Water District (OCWD), the purveyor of domestic water in Orange County. Through several investigations, the OCWD identified several Potentially Responsible Parties (PRP's) that they suspect may have contributed to the VOC plume. The Fullerton Business Park was one of the PRPs identified. The OCWD has reportedly filed a lawsuit naming the identified PRPs as defendants, apparently in an attempt to develop funding to assist in the remediation of the regional groundwater plume.

## 4.0 SITE HISTORY

EEC evaluated historic land use through the examination of selected historical aerial photographs, historical topographic maps, fire insurance maps, and city directories. The evaluation of this information is described in the following sections.

The Subject Property is currently owned by Elden Collections, a furniture manufacturer. Elden's onsite operations have been recently reduced by 75%, and they are planning moving from this facility in the near future. Elden purchased the Subject Property from Red Eagle Properties in 1995. Red Eagle in turn bought the Subject Property from Resolution Trust Corporation (RTC) in May of 1994. The EDR city directory lists the Subject Property as Eye Encounter in 1991, however no additional information was found to confirm this business being present at the Subject Property. In the early 1990, Woodmill Products (Woodmill) leased the property. Woodmill manufactured picture frames and performed silk screening. From 1960 to 1985 the site was occupied by Arnold Engineering Company (Arnold). Arnold provided stamping and milling services to the electronics industry. Arnold used the following chemical onsite: ferric chloride, trichloroethane III, Chem-Strip 31817, and magnesium methylate. Several metals including low-nickel, silicon steel, nickel and iron alloys, copper, and stainless steel were used at the Subject Property. Prior to 1960, the site was occupied by Ensign Carburetor Company/Butane and Propane Equipment Manufacturing.

### 4.1 Aerial Photographs

The general type of activity and land use can often be discerned from the type and layout of structures visible in an aerial photograph; however, specific elements of a site operation cannot normally be determined from the photographs. With this in mind, EEC reviewed aerial photographs provided by EDR. EDR provided photographs for the years 1927, 1938, 1947, 1953, 1968, 1976, 1990, 1995, and 2002. The following is a summary of information pertaining to the Subject Property and vicinity ascertained from the reviewed aerial photographs. Copies of the aerial photographs are presented in Appendix G.

Year	Site	Site Vicinity
1927	Developed with orchards	Developed with orchards and associated residential structures. Major surface streets are present.
1938	Developed with orchards	Developed with orchards and associated residential structures. Major surface streets are present.
1947	Developed with orchards	Developed with orchards and associated residential structures. Major surface streets are present.
1953	Developed with orchards	Developed with orchards and associated residential structures. Major surface streets are present.
1968	Developed with an industrial structure which is the present day site configuration.	Developed with industrial properties and orchards. The 91 freeway is present to the south of the site.
1976	Developed with an industrial structure which is the present day site configuration.	Developed with industrial properties and orchards.
1990	Developed with a industrial structure which is the present day site configuration	Developed with industrial properties, orchards are no longer present in the site vicinity.

Year	Site	Site Vicinity
1995	Developed with a industrial structure which is the present day site configuration	No significant changes.
2002	Developed with a industrial structure which is the present day site configuration	No significant changes.

No potential environmental concerns associated with the historical use of the Subject Property were observed during the review of aerial photographs.

#### 4.2 Topographic Maps

The general type of activity and land use can often be discerned from the type and layout of structures visible on a historic topographic map. Specific elements of a site operation cannot normally be determined from the map. EEC reviewed historic USGS topographic maps for information regarding past uses of the Subject Property for the years of 1898, 1902, 1935, 1950, 1965, 1965-1972, and 1965-1981. A summary of information pertaining to the Subject Property and vicinity ascertained from the maps is listed below. Copies of the topographic maps are included in Appendix H.

Year	Map ID	Site	Site Vicinity
1898	Anaheim	Undeveloped	The city of Fullerton has been developed directly west of the Subject Property. The city of Anaheim is developed to the south. Major roads are in place as are the Santa Ana-Southern Pacific and Topeka and Santa Fe Railroad lines railroad.
1902	Corona	Undeveloped	Continued development throughout the area including the cities of Orange, Garden Grove, Tustin, Buena Park, Los Alamitos, La Habra, and Placentia.
1935	Garden Grove	Undeveloped	Continued development.
1950	Anaheim	Undeveloped	Continued development.
1965	Anaheim	Developed with a warehouse building, this is the current site configuration.	The block on which the Subject Property is located has been developed with industrial structures and citrus groves.
1965-1972	Anaheim	Developed with a warehouse building, this is the current site configuration.	Continued industrial development in the site vicinity. Citrus groves are no longer present near the Subject Property.
1965-1981	Anaheim	Developed with a warehouse building, this is the current site configuration.	Continued industrial development in the site vicinity. Several citrus groves are present near the Subject Property.

No potential environmental concerns associated with the historical use of the Subject Property were observed during the review of topographic maps.

### 4.3 City Directories

EEC contracted EDR to review city directories for the Subject Property. A summary of information pertaining to the Subject Property is listed below. A copy of the City Directory is included in Appendix I.

Year	Address	Listing	Source
1920 to 1975	1551 East Orangethorpe Avenue	Not Listed	Multiple Sources, see Appendix H
1975	1551 East Orangethorpe Avenue	Arnold Engineering Company; Pacific Division	Luskeys Brothers & Co.
1991	1551 East Orangethorpe Avenue	Eye Encounter	Pacific Bell
1992 to 2002	1551 East Orangethorpe Avenue	Not Listed	Pacific Bell

### 4.4 Oil and Gas Maps

According to the State of California Department of Conservation - Division of Oil, Gas, and Geothermal Resources, Map W1-6, there are no wells in the direct vicinity of the Subject Property.

### 4.5 Fire Insurance Maps

EDR - Sanborn was consulted for Sanborn Fire Insurance Maps. Fire insurance maps were developed for use by insurance companies depicting facilities, properties, and their uses for many locations throughout the United States. These maps provide prior land use history and assist in determining whether there may be potential environmental contamination on or near the Subject Property. These maps, which have been periodically updated since the late 19<sup>th</sup> Century, often provide valuable insight into historical property uses.

No Sanborn Maps coverage was indicated for the Subject Property. A certificate of no coverage is included in Appendix J.

## 5.0 REGULATORY REVIEW

EEC submitted written requests to several federal, state, county and local agency representatives to obtain information regarding the potential presence of hazardous substances at the site and to evaluate the potential for the site to be impacted by offsite sources of contamination. The regulatory file review correspondence is included as Appendix K. A summary of the findings from each agency are included below.

### 5.1 Agency File Requests

#### 5.1.1 United States Environmental Protection Agency

A file review for the Subject Property was requested from the United States Environmental Protection Agency (EPA). The EPA has not yet responded to the request. If pertinent information becomes available, EEC will forward this information to US Bank as an addendum to this report.

### **5.1.2 Pipeline Location Request**

A request for pipeline locations for the Subject Property was submitted to the State of California Fire Marshall (CSFM). SFM reports that there are no pipelines in the vicinity of the Subject Property.

### **5.1.3 South Coast Air Quality Management District**

Operation permits, notices of violation, and site inspection reports for the Subject Property were requested from the South Coast Air Quality Management District (AQMD). Several notices of violation (NOVs) and permits to construct were present in the file. The NOV were issued for failure to submit reduction plans, failure to meet 65%-transfer-efficiency, public nuisance violations, failure to obtain permits to operate. Additionally, permits to install four paint spray booths and associated equipment are included. Copies of these documents are included in Appendix K.

### **5.1.4 Regional Water Quality Control Board**

A file review for the Subject Property was conducted at the State of California Regional Water Quality Control Board (RWQCB) – Santa Ana Region. Several documents were found related to the Subject Property. The documents found were correspondents related to the reports described in Section 3.8. Additional, an Orange County Health Care Agency case closure letter dated December 15, 1995 was present in the file. Case closure was granted based on an evaluation of the health threat presented by the inhalation, ingestion, or dermal absorption of the residual contamination. The letter states that the CRWQCB was notified that residual chlorinated hydrocarbons were present at the Subject Property, and did not require a groundwater investigation at that time.

### **5.1.5 Department of Toxic Substance Control**

A file review for the Subject Property was requested from the State of California Department of Toxic Substance Control – Cypress and Glendale offices (DTSC). No DTSC records exist for the Subject Property at either DTSC location.

### **5.1.6 Orange County Health Care Agency**

A file review for the Subject Property was performed at the Orange County Health Care Agency (OCHCA). Several former site investigation reports, Phase I ESA's and a closure report were reviewed. Each report has been previously summarized in Section 3.8. A copies of the documents found at the OCHCA are presented in Appendix K.

### **5.1.7 Fullerton Building Permits**

A file review was conducted at the City of Fullerton Building Department. The permits were mostly related to construction, fire sprinkler and the installation of industrial equipment. Permitting for a clarifier and several paint spray booths were included. Other than the permits for the clarifier and the paint booths, no other information indicating potential environmental concerns were found. Copies of these documents are provided in Appendix K.

### **5.1.8 Fullerton Fire Department**

A file review was conducted at the City of Fullerton Fire Department. Reviewed documents included the hazardous material inventory data sheets for Elden and a report from ERM Enviroclean West (ERM). The ERM report documents sampling and disposal of accumulated rainwater when the Subject Property was vacant

in 1992. Sampled materials were found to be non-hazardous and disposed of accordingly. Copies of these documents are provided in Appendix K.

## 5.2 Surrounding Properties

EEC contracted Environmental Data Resources, Inc. (EDR) to provide information from federal and state environmental record sources in the form of integrated governmental agency lists identifying known or potential hazardous waste sites, landfills, and sites currently under investigation for environmental violations in the vicinity of the Subject Property. The demographic and geographic information available provides assistance in identifying and managing risk. The accuracy of the geocoded locations is approximately +/- 300 feet. The locations of the sites identified by EDR records search are included in Appendix L. A map showing the locations of the environmental concerns are included with the EDR Report. A summary of identified sites is presented below.

Database	Target Property	Search Distance (miles)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
<b>FEDERAL ASTM-STANDARD</b>								
NPL		1	0	0	0	0	NR	0
Proposed NPL		1	0	0	0	0	NR	0
CERCLIS		0.5	0	0	1	NR	NR	1
CERC-NFRAP		0.25	0	1	2	NR	NR	3
CORRACTS		1	0	1	1	0	NR	2
RCRIS-TSD		0.5	0	1	1	NR	NR	2
RCRIS Lg. Quan. Gen.	X	0.25	0	2	NR	NR	NR	2
RCRIS Sm. Quan. Gen.		0.25	3	14	NR	NR	NR	17
ERNS		TP	NR	NR	NR	NR	NR	0
<b>STATE ASTM STANDARD</b>								
AWP		1	0	0	0	0	NR	0
Cal-Sites		1	0	0	0	0	NR	0
CHMIRS		1	0	0	0	0	NR	0
Cortese		0.5	1	2	9	NR	NR	12
Notify 65		1	0	0	0	0	NR	0
Toxic Pits		1	0	0	0	0	NR	0
State Landfill		0.5	0	0	0	NR	NR	0
WMUDS/SWAT		0.5	0	0	0	NR	NR	0
LUST		0.5	1	4	14	NR	NR	19
CA Bond Exp. Plan		1.0	0	0	0	0	NR	0
UST		0.25	0	3	NR	NR	NR	3
VCP		0.5	0	0	0	NR	NR	0
CA FID UST		0.25	0	3	NR	NR	NR	3
HIST UST	X	0.25	1	6	NR	NR	NR	7
SWEEPS UST		0.25	0	4	NR	NR	NR	4
<b>FEDERAL ASTM SUPPLEMENTAL</b>								
CONSENT		1	0	0	0	0	NR	0
ROD		1	0	0	0	0	NR	0
Delisted NPL		1	0	0	0	0	NR	0



Database	Target Property	Search Distance (miles)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
FINDS	X	TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.25	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
AST		TP	NR	NR	NR	NR	NR	0
CLEANERS		0.25	0	1	NR	NR	NR	1
WIP		0.250	0	1	NR	NR	NR	1
EMI	X	TP	NR	NR	NR	NR	NR	0
CA SLIC		0.5	0	2	13	NR	NR	15
HAZNET	X	TP	NR	NR	NR	NR	NR	0
Orange Co. Industrial Site	X	TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY HISTORIC DATABASE								
Gas Stations/Dry Cleaners		0.250	0	0	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0
TP = Target Property NR = Not Reported at this Search Distance * Sites may be listed in more than one database For more information on sites listed above, see Appendix L								

### SUBJECT PROPERTY

The Subject Property is listed as Fullerton North Partners on the HAZNET, RCRA-LQG, and FINDS databases. The Subject Property is listed on the RCRA database as a large quantity generator with no violations reported. The Subject Property is on the HAZNET database because it generates and disposes of solvent waste mixtures by recycler.

The Subject Property is also listed as Country Affaire, Inc (also known as Elden) on the EMI, FINDS, Orange County Industrial Site, and HIST UST databases. The Subject Property is reported on the EMI database as an emission discharger as early as 1990. No violations were reported. The Orange County Industrial Site database listed the site as having a release of Perchloroethylene (also known as tetrachloroethene (PCE). The database referenced the site closure issued by the OCHD on December 18, 1995. The UST HIST database reports a 2,500 gallon clarifier as being present at the Subject Property. No releases were reported. Because this clarifier is reported on the UST HIST, and not the current UST list, this clarifier is likely the same clarifier that was removed in 1994.

The Subject Property is also listed as Red Eagle Properties LTD on the HAZNET database. The HAZNET database reports the site as disposing of waste oil and mixed oil by recycling.

### SURROUNDING SITES

The EDR report identified the following sites in the vicinity of the Subject Property:

**Inland Empire Equipment (1400 Orangethorpe Avenue, Fullerton, California 92831)**

This facility is listed on the LUST and Cortese databases, and is located 563 feet southwest and cross gradient of the Subject Property. The facility is listed on the LUST database for a gasoline release limited to soil. Case closure was granted on March 2, 1998. Due to the regulatory status and cross gradient location, it does not appear that this site poses an environmental threat to the Subject Property.

**Johnathon MG (1101 South Acacia Avenue, Fullerton, California 92831)**

This facility is listed on the HIST UST, RCRA-SQG, and FINDS databases, and is located 833 feet east of the Subject Property. The HIST UST database reported that a 2,000 gallon waste UST was located at the Subject Property. No releases were reported. The RCRA-SQG reports the facility as a small quantity generator and no violations are reported.

**Johnson Controls Battery Group (1550 Kimberly Avenue, Fullerton, California 92634)**

This facility is listed on the LUST, FINDS, RCRA-LQG, TRIS, RCRA-TSDF, CORRACTS, CERC-NFRAP, HAZNET, CA FID UST, EMI, CA WDS, SWEEPS UST, WIP, HIST UST, and UST databases and located adjacent to the north of the Subject Property. The facility is listed on the LUST database for two diesel releases limited to soil. The first release was identified during a tank removal in the late 1980s and was granted site closure on November 23, 1987. The second release is currently being remediated by excavation and disposal. No other information was identified. The facility is listed on the CORRACTS as being a manufacturer of storage batteries. Several TSD violations were reported on this database. The HAZNET database reports this facility as disposing of unspecified sludge waste at a landfill, alkaline solution without metals by recycling and surplus organic at a transfer station. No violations were reported. The site has been listed on the California Emission database since 1993. The HIST UST databases reports the site has contained five UST, ranging from 2000 gallons to 10,000 gallons. Based on reported releases to soil only, the site does not appear to be a threat to the Subject Property.

The following information was not included in the EDR report, but is pertinent to environmental concerns at the site.

**Anaheim / Fullerton VOC Plume**

A large portion of the Upper aquifer system in the Anaheim/Fullerton area of Orange County, California has been impacted by VOCs have caused several production wells to be removed from service. The plume originates east of the 57 Freeway and extends west, over 4 miles, to beyond Euclid Avenue. In places, the plume is almost 1 mile wide and extends to depths of at least 200 feet below grade. The Fullerton Business Park is located near the middle of the plume. The VOCs which have caused the plume are thought to have been released from a dozen or more industrial facilities overlying the impacted area. To date, only one responsible party has been actively remediating the plume. The OCWD has identified seven other businesses as Potentially Responsible Parties (PRPs). These PRPs include Northrop Corporation, Northrop Grumman of Anaheim, American Electronics, Mag Aerospace, Gulton Industries, Aerojet, and the Fullerton Business Park. Most of the identified PRPs are located within one mile or less of the Fullerton Business Park, and releases from one or more could negatively impacted groundwater beneath the Subject Site.

## 6.0 SUMMARY, CONCLUSIONS, AND RECOGNIZED ENVIRONMENTAL CONDITIONS

### 6.1 Summary and Conclusions

- The Subject Property is located approximately 700 feet west of the intersection of South Acacia and East Orangethorpe Avenue. The Subject Property, constructed in the late 1950s or early 1960s, is developed with a 108,000 square foot (ft<sup>2</sup>), single story manufacturing/warehouse building with associated office space. The remainder of the Subject Property consists of asphalt-paved driveways and parking areas. Professionally landscaped areas are generally located along the site perimeter and throughout the parking areas.
- The Subject Property is currently occupied by Elden Collections, a furniture manufacturer. Elden onsite operations consist of construction, painting, and staining furniture. According to Ms. Jo Elliott (site contact and Elden employee), business activities of Elden Collections has been reduced by 75% and Elden Collections is in the planning to move to an undetermined location.
- Based on a review of available historical sources, it appears that the Subject Property was undeveloped or orchard lands from at least 1898 through the 1950s. The present day warehouse building was developed in the late 1950s. The site has been occupied by several industrial manufacturers over the years.
- The Subject Property is currently owned by Elden Collections, a furniture manufacturer. Elden's onsite operations have been recently reduced by 75%, and they are planning moving from this facility in the near future. Elden purchased the Subject Property from Red Eagle Properties in 1995. Red Eagle in turn bought the Subject Property from Resolution Trust Corporation (RTC) in May of 1994. The EDR city directory lists the Subject Property as Eye Encounter in 1991, however no additional information was found to confirm this business being present at the Subject Property. In the early 1990, Woodmill Products (Woodmill) leased the property. Woodmill manufactured picture frames and performed silk screening. From 1960 to 1985 the site was occupied by Arnold Engineering Company (Arnold). Arnold provided stamping and milling services to the electronics industry. Arnold used the following chemical onsite: ferric chloride, trichloroethane III, Chem-Strip 31817, and magnesium methylate. Several metals including low-nickel, silicon steel, nickel and iron alloys, copper, and stainless steel were used at the Subject Property. Prior to 1960, the site was occupied by Ensign Carburetor Company/Butane and Propane Equipment Manufacturing.
- In September 1994 two clarifiers were removed from the site. During the removal of the clarifiers soil contamination was encountered. Subsequent site investigations identified the presence of hydrocarbon and chlorinated solvent compounds in the subsurface. Soil vapor extraction was initiated in 1994 to remediate the site. In 1995, the Orange County Health Care Agency (OCHCA) concluded that the site had been sufficiently remediated and granted site closure. Soil borings drilled at the conclusion of the remediation indicate that residual VOCs remained in the soil beneath the site. These VOCs included TCE at a concentration of 180 parts per million (ppm) at 105 feet bgs, just above the groundwater level. Records reviewed by EEC indicate that although site closure had been granted by the OCHCA, the RWQCB initially felt that additional assessment was required. The RWQCB later rescinded that recommendation when the current property owner explained that any contamination at the site was from a previous tenant. No groundwater samples have been collected beneath the site, even though VOC impacted soil extends very close to the regional groundwater level.
- The site is located within an area that is underlain by an extensive regional VOC plume in groundwater. This VOC plume has been the subject of intensive investigation and remediation. The

primary investigative agency has been the Orange County Water District (OCWD), the purveyor of domestic water in Orange County. Through several investigations, the OCWD identified several Potentially Responsible Parties (PRP's) that they suspect may have contributed to the VOC plume. The Fullerton-Business Park was one of the PRPs identified. The OCWD has reportedly filed a lawsuit naming the identified PRPs as defendants, apparently in an attempt to develop funding to assist in the remediation of the regional groundwater plume.

- Groundwater is located approximately 110 feet below ground surface (bgs) and flows to the west-southwest.
- The Subject Property is listed on several government databases that indicate that the site formerly contained a clarifier. EEC could not find any evidence that USTs were ever located onsite; therefore, it is likely that this reference refers to the previously removed clarifiers. These databases also list the site as being monitored for emission releases and as a hazardous waste generator.
- The following observations were made during EEC's site reconnaissance:
  - No visual evidence indicating the present use of USTs containing hydrocarbon products, such as vent pipes, manhole covers, or concrete cuts was identified at the Subject Property.
  - No visual evidence of past or present aboveground storage tanks (ASTs) was observed at the Subject Property.
  - Hazardous materials or hazardous waste including paints, lacquers, and stains are currently stored or used at the Subject Property. These materials appear to be stored properly at the Subject Property.
  - Minor staining was noted in the asphalt-paved parking lot; however, this staining appears to represent de-minimus risk to the environment.
- The results of the EDR radius search did not identify any sites in the vicinity of the Subject Property that would be a potential environmental concern.
- Several Air Quality Management District (AQMD) Violation were found related to the Subject Property. These violations do not appear to pose any environmental threat to the Subject Property.
- On April 10, 1992, Converse Environmental performed an asbestos inspection survey at 1501 -1561 East Orangethorpe Avenue, Fullerton, California. Both friable and nonfriable asbestos was detected at the Subject Property.

## **6.2 Recognized Environmental Conditions**

Two Recognized Environmental Conditions (RECs) were determined to be associated with the Subject Property. The term "recognized environmental condition" is defined by ASTM as the "presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

- Without further information that excludes the Subject Property, the pending lawsuit with the OCWD is considered a REC at the Subject Property. This lawsuit is due to the fact that both soil and groundwater beneath the site are known to be impacted by VOCs. If discharges from the Subject

Property are tied to the regional VOC plume it is possible that a new property owner could become liable for a costly remediation. EEC recommends consulting with an environmental attorney to assess how this risk could be mitigated.

- Residual concentrations of VOCs remain in soil beneath the site and extend to near the groundwater surface (110 feet bgs). Additionally, subsurface investigations conducted at the site appear to have been intentionally stopped short of collecting groundwater samples. Correspondences with the RWQCB indicate that the decision not to pursue assessment of groundwater was not for technical reasons, but was instead due to the fact that the current owner was not the source of the impact. Therefore, EEC believes that the site assessment activities have not fully characterized the extent of the impact, and that the site may have been prematurely closed. If the former property owner or tenant responsible for the release of VOCs cannot be identified or does not have sufficient monetary resources, the current property owner could be held liable for future investigative or remediation efforts.

One Historic Recognized Environmental Condition (HREC) was determined to be associated with the Subject Property. The term "historic recognized environmental condition" is defined in ASTM Practice E 1527-00 as "conditions which in the past would have been considered a REC, but which may or may not be considered a REC currently."

In September 1994 two clarifiers were removed from the Subject Site. Soil contamination was encountered beneath the clarifiers and continues to be a potential issue at the site, as described in the REC, above.

## 7.0 RECOMMENDATIONS

Environmental Engineering & Contracting, Inc. (EEC) has performed this Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E 1527-00 and EEC's Standard Limitations for the Subject Property identified as Elden Collections, 1551 East Orangethorpe Avenue, Fullerton, California.

Based on the observations and records reviewed during this Phase I ESA, EEC believes that historic onsite activities have adversely affected the subsurface soil and groundwater at the Subject Property. Additionally, the Subject Property is currently being named in a lawsuit with the OCWD, therefore, the property owner and lender must determine how this lawsuit could potentially impact each party. EEC recommends that legal council review any sales agreement prior to completing the site purchase.

## 8.0 REFERENCES

American Society for Testing and Materials. *Standard Practice for Environmental Site Assessments: Phase I Environmental site-Assessment Process*. ASTM Designation: E 1527-00.

BEM Systems, Inc, Phase I Environmental Site Assessment and Comprehensive Asbestos Survey, September 30, 1992

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Converse Environmental West, Asbestos Inspection Report, April 10, 1992

Converse Environmental West, Chemical Analysis of Liquid in Clarifier, January 31, 1994

Converse Environmental West, Update to Phase I Preliminary Site Assessment, January 17, 1994

Converse Environmental West, Clarifier Removal and Soil Analysis, October 18, 1994

Converse Environmental West, Site Characterization Summary Report, November 11, 1994

Converse Environmental West, Summary Report Additional Site Characterization, December 13, 1994

Converse Environmental West, Summary Report of Additional Site Characterization, January 26, 1995

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Converse Environmental West, Summary Report of Additional Site Characterization, May 18, 1995

Converse Environmental West, Soil Remediation Closure Report, December 12, 1995

Environmental Data Resources, Inc. (EDR) aerial photographs dated 1938, 1946, 1953, 1968, 1977, 1990, 1994, and 2002.

Environmental Data Resources, Inc. (EDR) Report, Southport, Connecticut. Sparks and Tucker Rev. Trust, 1551 East Orangethorpe Avenue, Fullerton, California. Inquiry Number 1526729.2s, October 6, 2005.

Environmental Data Resources, Inc. (EDR) topographic maps dated 1898, 1902, 1935, 1950, 1965, 1972, and 1981.

FEMA Flood Insurance Rate Maps, Digital Q3 Flood Data Files, GDT/Dynamap/2000 Data Set.

Norris, Robert M. and Webb, Robert W., *Geology of California*, Second Edition, 1990.

## 9.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

This Phase I Environmental Site Assessment was performed by Stephanie Tanguilig, a Staff Engineer with Environmental Engineering & Contracting, Inc. (EEC). Ms. Tanguilig holds a Bachelor of Science Degree in Environmental Engineering from the University of California at Riverside, in Riverside, California. Ms. Tanguilig has performed several Phase I Site Assessments throughout the Western United States, New York, and North Carolina.

This Phase I Environmental Site Assessment was reviewed and overseen by Mark Zeko, Vice President and Principal Hydrogeologist with Environmental Engineering & Contracting, Inc. (EEC). Mr. Zeko is a Registered Geologist (#6278) and Certified Hydrogeologist (#310) in the State of California. He has over 15 years experience as an environmental professional and has performed hundreds of Phase I Environmental Site Assessments in California, Nevada, and Arizona. Other experience in the environmental industry includes managing and performing subsurface investigation and remediation of a variety of contaminants, and the use of fate and transport models to define cleanup goals and objectives.

H



August 12, 1996

RETECHS-ENVIRONMENTAL DEPT.  
LOS ANGELES, CA

1135

AUG 13 1996

**Mr. William E. Rauch**  
Environmental Analyst  
**WELLS FARGO BANK**  
Real Estate Technical Services Group  
333 S. Grand Avenue, Suite 750  
Los Angeles, CA 90071

**RE: PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE**  
**ELDEN COLLECTIONS**  
**1551 E. ORANGETHORPE AVENUE**  
**FULLERTON, CALIFORNIA**  
**RETECHS NO. ENV03681A**  
**PROJECT NO. 96-247A**

Dear Bill:

I am pleased to submit this Phase I Environmental Site Assessment **Update** (Phase I ESA Update) report for the above-referenced project. A Phase I ESA and a Comprehensive Asbestos Survey were performed by BEM Systems, Inc. for AMRESKO, Inc. in 1992 (Reference 1). The property assessed by BEM was identified as Fullerton Business Park North at 1501-1561 East Orangethorpe Avenue in Fullerton, which included the subject property. Converse Environmental West (Converse) conducted a Phase I ESA of this business park in 1992 for Asset Management Resolution Company (Reference 2). Numerous other reports were prepared by Converse Consultants Orange County (Converse), including an Update to the Phase I ESA in 1994 (Reference 3), several site characterization reports (References 4 through 7), and a Soil Remediation Closure Report dated December 12, 1995 (Reference 8). This report by Bryant GeoEnvironmental Services (BGS) presents the results of a Phase I ESA Update for the subject property (Property), in accordance with **Wells Fargo Bank (WFB)** requirements. Pertinent project-specific information for your consideration is summarized below, as required.

#### **I. Project Identification**

This industrial property is located at 1551 E. Orangethorpe Avenue in the City of Fullerton, County of Orange, California (refer to VISTA Vicinity Map and Location Map in Appendix A). The Property is part of the 13-acre Fullerton Business Park North. The subject parcel reportedly encompasses about 3.5 acres. It is generally occupied by one 1-story warehouse/office building, covering about 108,000 square feet of floor space, including about 3,000 square feet in office

space. This parcel was first developed sometime between 1953 and 1967, prior to the remaining portion of the business park (References 1 and 2). This report is submitted as part of the assessment services performed by **Bryant GeoEnvironmental Services** (Project No. 96-247A) for **WFB** (Project No. ENV03681A).

## **II. Property Use**

At the present time, one warehouse/office building totaling about 108,000 square feet, including approximately 3,000 square feet of office space, and at-grade parking areas occupy this property. The subject building covers approximately 75% of the entire parcel. The Property is almost completely used by **Elden Collections**, a division of **Country Affaire**, which manufactures "country casual" furniture. The other approximately 20% of the Property is used by **Johnson Controls** for warehousing purposes. It was indicated that Elden Collections assumed occupancy of this building in February 1995 (References 12 and 13). The subject building and associated improvements were reportedly renovated in the first part of 1995.

The subject property, including the other part of the Fullerton Business Park North that covered about 13 acres on the north side of Orangethorpe Avenue, was generally undeveloped land until sometime after 1953, but before 1967. According to the various documents reviewed, the subject business park property and surrounding area were covered by citrus groves and a few residential structures in 1953. The subject building was evidently the first structure constructed in the (future) business park sometime before 1967. As indicated by Converse and BEM, the subject building was still the only industrial structure on the business park property in 1976. Based on a previous aerial photographic review, the other buildings in the business park were completed sometime between 1983 and 1986.

## **III. Scope of Work**

This Phase I ESA Update was conducted to provide information regarding possible hazardous substances, petroleum products and related wastes, asbestos, or other environmental conditions that may be present on this property or located nearby that might affect the Property. This assessment focused on the possible presence of known or reported hazardous materials and wastes that could be associated with, for example, underground storage tanks, landfills, chemical storage areas, and treatment facilities. This Phase I ESA Update did not include extensive site characterization, nor on-site sampling and testing of suspect building materials.

In summary, the scope of work was limited to conducting a specific Phase I ESA Update for the Property. Generally, this Update included the acquisition of readily available and reasonably ascertainable records, site reconnaissance, interviews as needed, review of historical and

regulatory information obtained, and preparation of this summary report. This report was prepared with the intent of conforming with the current WFB requirements for "Phase I Update". Further, there were no project-specific exclusions, or unusual restrictions assigned to this Phase I Update.

To supplement the original Phase I ESA, the following specific tasks were conducted to complete this Phase I ESA Update:

- Review of additional site-specific reports provided by Elden Collections.
- Reconnaissance of Property and surrounding parcels.
- Review of an updated regulatory database report.

#### **IV. Summary of Previous Phase I and II ESAs**

A Phase I ESA and a Comprehensive Asbestos Survey were performed by BEM Systems, Inc. for AMRESKO, Inc. in 1992 (Reference 1). The property assessed by BEM was identified as Fullerton Business Park North at 1501-1561 East Orangethorpe Avenue in Fullerton, which included the subject property. Converse Environmental West (Converse) conducted a Phase I ESA of this business park in 1992 for Asset Management Resolution Company (Reference 2). Numerous other reports were prepared by Converse Consultants Orange County (Converse), including an Update to the Phase I ESA in 1994 (Reference 3), several site characterization reports (References 4 through 7), and a Soil Remediation Closure Report dated December 12, 1995 (Reference 8). These referenced reports were the basis of this Phase I ESA Update. Information previously gathered by BEM and Converse regarding prior ownership or historical use of the Property was judged to be adequate (refer to References 1 and 2).

Based on previous Phase I ESA information, the Property was not a listed/regulated facility (1992). However, the most recent tenant (Woodmill Products, Inc.) occupying "Building 1551" was reportedly a wood finisher, and used paint, wood finish, thinners, and solvents. Previous users included a manufacturer of butane and propane equipment, and a stamper and miller of electronics equipment. As noted by BEM and Converse, a "pit" and a "clarifier" were identified near this building. Various containers of paints, lacquers, lube oil, and thinners were discovered at this facility by BEM and Converse, as well as numerous empty 55-gallon drums. Although some damaged asphalt was found next to the clarifier, no obvious stained areas or evidence of past spillage were reported by the consultants. However, Converse reported that a "spill of a sludge containing iron, nickel, and copper" occurred at the Woodmill facility in 1985. Cleanup documents were not found by Converse.

BEM revealed, based on a review of regulatory lists, that a former tenant in another building within the business park (Golden State Paving at 1511 E. Orangethorpe, Suite A) was identified

as a hazardous waste generator, but it had vacated the property. No USTs were evidently registered to the Property. None of the subject facilities (business park tenants) were identified as LUST sites in 1992. Converse reviewed regulatory files for several facilities in the site area (1992). Among the adjacent sites of concern was Jonathan Manufacturing. This site was listed as a LUST facility. Contaminated soil was reportedly removed, and the Orange County Health Care Agency (OCHCA) issued a closure letter in May 1990. Johnson Controls, a tenant in the 1551 Building was identified as a large-quantity generator (i.e., of various lead wastes and stoddard solvents, as part of its battery manufacturing process). However, the BEM report indicated that Johnson Controls only uses the space for warehousing of battery casings. Converse found 30 "contaminated sites" within 2,000 feet of the Property. None of these sites were indicated to be of concern.

BEM conducted a "comprehensive (AHERA) asbestos survey" of the subject property in 1992. The consultant listed the suspect ACMs in each of the five buildings. Of the 246 samples collected, asbestos was found in only a very few, namely "roofing caulk" on each of the buildings. Converse's asbestos survey revealed similar results. This ACM was not judged to be friable. An Asbestos Management Plan was prepared by BEM in August 1992.

Two clarifiers were reportedly removed from the subject facility in 1994. Two soil samples were collected from the bottom of the excavations. One sample revealed 16 ppm TRPH, and the other sample revealed 27,000 ppb PCE and 3,600 ppm TRPH. Converse drilled one boring and found maximum concentrations of PCE at 38 ppb (30 feet) and of TRPH at 12 ppm (40 feet). The boring was terminated at 40.5 feet. Converse concluded that "it does not appear that serious contamination of the soil from PCE or TRPH exists..."; and, they recommended site closure.

Additional phases of investigation were completed by Converse. As summarized by Converse, seven borings were advanced using a Geoprobe Systems sampling technique in December 1994. Relatively high PCE (96,000 ppb) concentrations were found in one boring near the former clarifier. In January 1995, an additional nine borings were advanced to maximum depths of 40 feet. Significant concentrations of PCE were reportedly encountered to depths of 35 feet. The higher concentrations were found in soil samples from depths of 20 to 30 feet. There was no discussion of other VOCs, that may have been detected.

In March 1995, Converse drilled two more borings (BH-14 and BH-15) to depths of 115 feet. Converse encountered groundwater at about 115 feet below grade in both borings (Reference 7). It was believed that this represents the Talbert Aquifer, a source of production/drinking water for Orange County. A perched zone was encountered at about 60 feet below grade. More importantly, Converse concluded that "groundwater beneath the site has not been impacted by a release of PCE from the former clarifier, and the base of the PCE-impacted soil is defined at about 60 feet below grade". PCE was not detected in samples collected below 65 feet (i.e., 70 to 105 feet). However, there was no discussion regarding other VOCs detected in samples, particularly TCE which was found in samples collected at 105 feet in both borings at concentrations of 180 ppb and 160 ppb.

Admittedly, these should be considered relatively low concentrations; however, the TCE-concentration trend and the proximity of groundwater (about 10 feet above the water table) suggests that groundwater may have been impacted by TCE.

Evidently, the local lead (oversight) agency, namely the Orange County Health Care Agency, expressed concern with respect to the PCE levels identified in the subsurface (i.e., a potential "public health excess lifetime cancer risk", based on a simplified vapor diffusion model). As a result of this concern, Converse installed and operated a soil vapor extraction and treatment system (VES), in accordance with an approved work plan dated July 26, 1995. This VES was reportedly operated from August 15, 1995 until November 27, 1995. Because of the apparent effectiveness of the VES, it was shut down on November 10, 1995. On November 20, 1995, Converse restarted the system, and collected confirmation VOC measurements. Based on decreasing levels of VOCs detected between November 10 and 27, 1995, it appeared that "the remedial efforts had been successful in reducing the identified soil contaminants."

To verify the apparent effectiveness of the VES, Converse advanced three soil probes in the impacted area using a Geoprobe soil sampling rig. The probes were reportedly positioned next to previous borings BH-5, BH-8, and BH-9. Soil samples were collected at 5-foot intervals to the total depths drilled between 25 and 40 feet. PCE concentrations were found in the soil samples ranging from 0.3 to 25.3 ppm (25,300 ppb). Lower concentrations of other VOCs (i.e., TCE) were also reportedly detected between depths of 15 and 30 feet. Converse concluded that "PCE concentrations have been significantly reduced by the remediation system from 84.5 to 0.33 ppm (15 feet bgs), from 96 to 12.8 ppm (20 feet bgs), and from 88 to 13.7 ppm (25 feet bgs)." The VES appeared to be effective in the reduction of VOC concentrations. Further, Converse requested that the recent analytical data be evaluated in accordance with the "simplified vapor diffusion model". If the model results were found to be favorable, Converse/Red Eagle Properties would request site closure (Appendix D).

On December 11, 1995, the RWQCB issued a letter to Red Eagle Properties regarding a meeting held on November 1, 1995 (Reference 10; Appendix D). As a result of previous investigations, the RWQCB had originally requested that a groundwater investigation be conducted, including the installation of monitoring wells. However, due to the ownership history, potential responsible party (RP) identified, and the remedial efforts implemented by Red Eagle Properties (not the RP), the RWQCB withdrew its request for a groundwater investigation. (Mr. Henry Ames of Converse indicated that further groundwater assessment was most likely not required for several reasons, such as the known regional impact to the groundwater quality in this area as a result of numerous potential point sources, namely industrial users in the up-gradient direction; the depth to groundwater and its potential uses; and, the corrective measures already accomplished to date.)

The Orange County Health Care Agency issued a closure letter to Red Eagle Properties on December 15, 1995 (Appendix D). As stated in this letter, on-site remedial action was confirmed, and "no further action is required at this time". It should be pointed out that this "closure" was

based on several factors. For example, the agency issued this closure letter based on an evaluation of the "health threat", and on the current use of the Property. Further, this closure letter acknowledged that no groundwater investigation would be required at this time.

## **V. Summary of Phase I Update**

A reconnaissance of the Property and surrounding properties was conducted on August 1, 1996. In general, the Property consists of a relatively old concrete 1-story block-wall structure, with a steel-framed plywood roof deck, in average to good condition. The exterior of the building appeared to have been recently painted. This building is surrounded by asphalt surfaces including asphalt parking areas also used by the other tenants within the business park. A concrete-covered loading dock exists at the southeast corner of the building (Photographs 1 through 3, Appendix B). This loading dock consisted of a large concrete ramp, descending to the edge of the building, and a truck docking area that extended about 80 feet inside the building. A 2-foot by 2-foot steel grate over a 3-foot deep concrete vault was observed at the northwest corner of the ramp. It was found to be equipped with a sump pump, and relatively dry at that time.

Aside from two large metal bins used to store scrap wood and one large sawdust collection system, there were no suspect or unusual features observed next to the building. No evidence of the aforementioned clarifiers or the previous work by Converse was noted, with the exception of: an apparent borehole that had been grouted with concrete near the former clarifier location; a utility trench that had been backfilled with concrete; and, approximately 30 55-gallon storage drums that had been placed next to the easterly fence (Photograph 6). Nine of these drums were noted to be empty. Four drums were labeled "BH-14, 0-10, 10-20, and 30-40", which presumably contained soil cuttings excavated from Converse's boring BH-14. These drums were not properly identified/marked in accordance with local requirements; and, it appears as though they have been stored on-site past the normal 90-day limit. Nine other drums were labeled "spent activated carbon, not classified, test results pending".

Another 11 drums were found at the northeast corner of the Property. Some were labeled "spent activated carbon", and a few were labeled "VE-1" (soil excavated from one of Converse's three on-site VES wells?). A 2-foot by 4-foot steel grate over an approximately 4-foot deep concrete vault (storm drain) was observed next to the latter drums. Some water was at the bottom of the vault, but no obvious staining in the vault or chemical sheen was noted on the water surface.

Johnson Controls leases the northwest portion of the building and the associated outside storage yard. It is understood that Johnson Controls uses the warehouse area to store battery casings. The outside area was paved, and used to store more than 200 empty (new) 55-gallon storage drums. Stacks of wooden pallets were observed next to a concrete block-wall structure with a wooden roof (canopy). This structure was aligned along the rear (northern) property boundary (Photograph 5). It had a concrete slab, and was divided into seven compartments. Older stains were evident in a

few locations on the concrete slab. There were a few empty 55-gallon drums in a couple of the compartments. One drum was about half full of battery cleaners (wire brush post cleaners).

There was one trash enclosure next to the east side of the Property and near the southeast corner of the building. One trash dumpster was empty, and the other one was full of typical trash bags. No unusual containers, such as paint cans, were observed inside the dumpsters. The underlying concrete surface was found to be relatively clean.

The interior area of the building was divided into administrative offices in the front, and a large warehouse area. The office portion of the building had an entrance area, several individual offices, restrooms, and a large room full of completed furniture. These offices were finished with carpeting, drywall and plaster, and acoustical ceiling panels in very good condition. The restrooms had vinyl flooring, and plaster walls and ceilings.

The warehouse area had an unpainted concrete floor, painted concrete block-walls, and drywall/plaster interior walls. The concrete slab floor had several rectangular-shaped areas that had been patched with concrete, presumably associated with the previous uses of this building (i.e., Woodmill facility in the 1980s). The large manufacturing area of the Elden Collections facility was divided into four separate areas. The northeast quadrant was occupied by several large tables, saws, sanding machines, etc. used during the initial stages of the (wood) furniture manufacturing (e.g., cutting and shaping). Two 55-gallon drums of "aliphatic glue" and six 5-gallon containers of "Titebond, original wood glue" were found in the southwest corner of this area. A minor amount of dried glue was present on the concrete floor.

The southeast quadrant was used primarily to assembly the furniture, such as beds, wall units, dressers, etc. Wood working was also conducted in the southwest quadrant of the warehouse area. Numerous bed frames and shelves full of wrought iron parts had been placed in this area. The northwest quadrant was used exclusively for painting and staining the various wood items. There appeared to be six paint booths of different sizes and designs in this room. According to the occupant (References 12 and 13), four of these paint booths are permitted and in use (Appendix D). These paint booths were found to have hoods and vacuum-exhaust systems. This area was observed to be relatively clean, with minor paint on the floor (Photograph 7). Two 55-gallon drums were full of discarded rags used for the finishing work.

A small room along the west wall of the manufacturing area was used for storage. Supplies included numerous containers and cans of paints, stains, and glues (Photograph 8). These materials were typically in 1-quart to 5-gallon containers on shelves or directly on the concrete floor. Contents were identified as "Lepage's original glue", "Regency" acrylic enamel paint, and "EVR-GARD Coatings", for example. A minor amount of dried paint and stained concrete was noted in this storage room. According to Mr. Needle, this facility does not generate hazardous waste; and, therefore his business does not have waste manifests on file. It appeared as though most of the products (paints and finishes) were probably consumed on-site.

There were no pole-mounted electrical transformers observed on the Property. One pad-mounted transformer was on the west side of the subject building. No obvious leakage was evident.

In summary, the overall property seemed to be well maintained, and in good condition, particularly because this is a relatively new facility (i.e., 18 months old).

The subject property is surrounded, for the most part, by similar industrial facilities with relatively large buildings. Surrounding land uses were noted to be generally the same as previously reported by other consultants. The properties to the immediate west and southwest are part of the Fullerton Business Park North. Tenants identified in these buildings included "Grinnell Fire Protection" in the 2-story multi-tenant building at 1521 E. Orangethorpe, "Intersection Development Corp." and "SPL Environmental Laboratories" at 1511 E. Orangethorpe, and "Trans Union" in the building to the south at 1561 E. Orangethorpe Avenue. "Grinnell Supply Sales Company" and "Allied Tube & Conduit" occupied facilities across Orangethorpe farther south. A very large Johnson Controls facility exists to the north at 1550 E. Kimberly Avenue, and Jonathan Manufacturing is situated to the immediate east of the subject property.

Available public records, including databases and agency lists, were reviewed to determine if hazardous waste sites or other regulated facilities are currently known to exist within one mile of the subject property. A site-specific record search was conducted by VISTA Information Solutions, Inc. of San Diego (Appendix D). Relevant information is summarized below.

The subject property was listed in the VISTA report. It was identified as "Fullerton North Partners" and as "Fullerton Business Park North" with an address of 1551 E. Orangethorpe Avenue (VISTA Location No. 1B). Specifically, the subject facility was listed as a RCRA large-quantity generator of hazardous waste, and as an Orange County Industrial Cleanup site, associated with past uses, as discussed above. The latter listings indicated the substances leaked as PCE and TCE, with a "leak date" of October 1, 1994, and an "abate date" of December 18, 1995, which is consistent with other information obtained.

There are five reported federally listed sites (i.e., NPL, CERCLIS, TSD, etc.) within one mile of the Property. One of these facilities was identified as Johnson Controls Globe Battery Division (VISTA Location No. 9) at 1550 E. Kimberly Avenue, located to the immediate north. This facility was indicated to be a CORRACTS site, a CERCLIS site, a RCRA TSD facility, a Cortese site, a TRIS site, and a LUST site. According to State and regional sources, there are 14 sites identified on the **Leaking Underground Storage Tank (LUST)** listings, with the closest site shown to be more than 500 feet away (not including the aforementioned Johnson Controls facility). No facilities are identified on the **Solid Waste Information System (SWIS)** listing. There are four other **Registered Underground Storage Tank (UST)** sites within 1/4 mile of the Property. According to the VISTA report, there are 10 **RCRA** generators in the general proximity of the subject property, including the aforementioned "Fullerton North Partners". No **Emergency Response Notification System (ERNS)** sites were identified.



The only listed site judged to be of potential concern, because of its close proximity, was the Johnson Controls facility (VISTA Location No. 9). As noted above, this facility is a multi-listed site. Evidently, a diesel release was discovered at the Johnson Controls facility. The VISTA information revealed that only soil was impacted. The remedial action taken was apparently "excavate dispose". The regulatory status was stated to be "remedial action taken". It seems as though no further action was required (although a formal closure status was not identified). No violations, nor other unauthorized releases were reported. Therefore, this off-site facility would not be expected to have impacted the Property.

## **VI. Environmental Issues**

Based on the results of this Phase I ESA Update, there were no current significant environmental concerns identified at the subject property. Although a significant release had occurred from one of two former on-site clarifiers, resulting in VOC-impacted soil at the Property, adequate corrective action had reportedly been accomplished to the satisfaction of the local regulatory agencies. It is understood that the regional groundwater quality has evidently been degraded in this area because of multiple known and suspected VOC releases, including those in the up-gradient direction. Further, it was demonstrated by Converse that a significant reduction in VOC concentrations in the unsaturated zone resulted from on-site vapor extraction. Groundwater assessment was not required by the RWQCB. And, again, regulatory closure has been granted to the Property relative to the past release.

## **VII. Recommendations/Additional Investigations**

Considering the results of this Phase I Update, site conditions observed, present and past land use, off-site information provided, and the findings contained in the original Phase I ESA reports and the various Phase II/site characterization reports, additional assessment/investigation is not considered warranted at this time.

However, the Property owner and/or the responsible party should be encouraged to remove the approximately 30 55-gallon drums from this property. Waste manifests, documenting proper removal and disposal, should be forwarded to Wells Fargo Bank as soon as practical. Additionally, the discarded materials placed along the northeast edge of the Property should be properly disposed off-site.

## **VIII. Limitations**

The findings in this Phase I Update report are based on readily available information acquired from several sources, including visual observations during the site reconnaissance, interviews,

information provided by WFB, information provided by the property owner, research of appropriate records and selected databases, and site data contained in the original Phase I ESA reports and in other documents. This Phase I Update was limited by the scope of work specified by WFB.

It is anticipated that this report adequately satisfies the intended purpose, and addresses the potential environmental conditions normally considered to be of concern. This assessment did not include on-site sampling and testing, nor a detailed subsurface investigation.

As used in this report, "hazardous material" or "hazardous substance" is synonymous with "toxic substance" as defined in the Superfund Law or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986; the Hazardous Materials Transportation Act (HMTA) of 1990, 49 U.S. Code, Section 1801 et seq.; the Toxic Substance Control Act (TSCA), 15 U.S. Code, Section 2601 et seq.; the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, 42 U.S. Code, Section 6901 et seq.; the Clean Water Act (CWA) of 1972, and amendments; the Clean Air Act (CAA) of 1970, and amendments; and applicable local rules and regulations.

It should be recognized that certain limitations exist with the completed Phase I ESA Update. Bryant GeoEnvironmental Services (BGS) cannot be responsible or liable for the accuracy of information provided by others. This assessment update should not be represented to preclude the possibility that hazardous substances are present at this time. Furthermore, this report should not be regarded as a guarantee that no such hazardous substances will be encountered at the subject site in the future.

This assessment report has been prepared by Mark E. Bryant of BGS, whose signature and professional seal appear below, for WFB. BGS has no interest or contemplated interest, financial or otherwise, in the subject property or surrounding properties, or in any entity which owns, leases, or occupies the subject property or surrounding properties or which may be responsible for environmental issues identified during the course of this assessment, and has no personal bias with respect to the other parties involved.

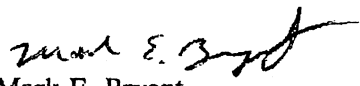
The information contained in this report has received appropriate technical review and approval. The conclusions have been based, in part, on professional judgment and founded on the results of assessment activities identified in this report, and an interpretation of such data based on professional experience and the standard of practice normally followed by similar professionals practicing in the same area or similar locality and under similar circumstances. No other warranty or limitation exists, either express or implied.

Further, this assessment report was prepared in accordance with Wells Fargo Bank's Phase I Update scope of work, for the use and benefit of Wells Fargo Bank, it's successors, and assignees. It is based, in part, on documents and other written information owned, possessed, or secured by Wells Fargo Bank. Neither this report, nor any of the information contained herein shall be used or relied upon for any purpose by any person or entity without the express written permission of Wells Fargo Bank.

It is believed that this information will satisfy your needs at this time.

Respectfully,

**BRYANT GEOENVIRONMENTAL SERVICES**

  
Mark E. Bryant  
Principal  
RG 3569, CEG 1046, REA 613

MEB:meb

Dist: 4/Addressee

Encl: Appendices

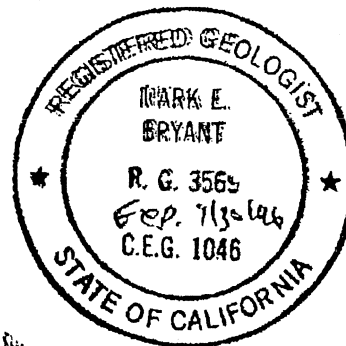
Appendix A - Site Maps

Appendix B - Photographs

Appendix C - References

Appendix D - Pertinent Information

Appendix E - Statement of Qualifications



**APPENDIX A**

**SITE MAPS**

1551 E. Orangethorpe  
Project No. 96-247A

August 12, 1996

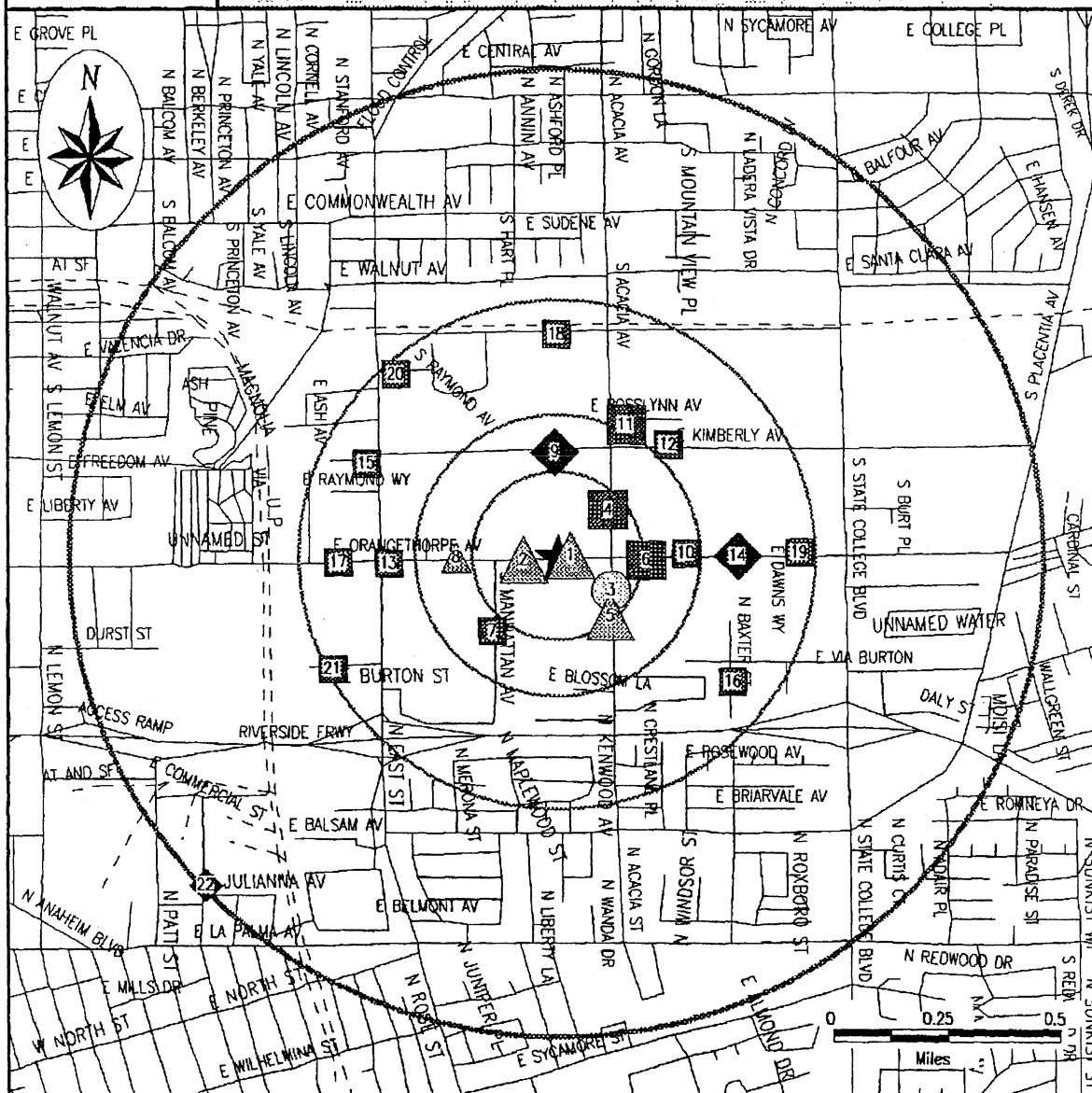
OCWD 043094





# SITE ASSESSMENT PLUS REPORT

## Map of Sites within One Mile



Subject Site	Category:	A 1 mi.	B 1/2 mi.	C 1/4 mi.	D 1/8 mi.
★	Databases Searched to:	◆	■	▲	○
	Single Sites	◆	■	▲	○
	Multiple Sites	◆	■	▲	○
Roads Highways Railroads Rivers or Water Bodies Utilities		NPL, SPL, TSD, CORRACTS	CERCLIS, SCL, LUST, SWLF	TRIS, UST	ERNS, GENERATORS
If additional databases are listed in the cover page of the report they are also displayed on this map. The map symbol used corresponds to the database category letter A,B,C,D.					

For More Information Call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403

Report ID: 001218-949

Date of Report: July 26, 1996

Page #3

OCWD 043096

**APPENDIX B**  
**PHOTOGRAPHS**

1551 E. Orangethorpe  
Project No. 96-247A

August 12, 1996

OCWD 043097



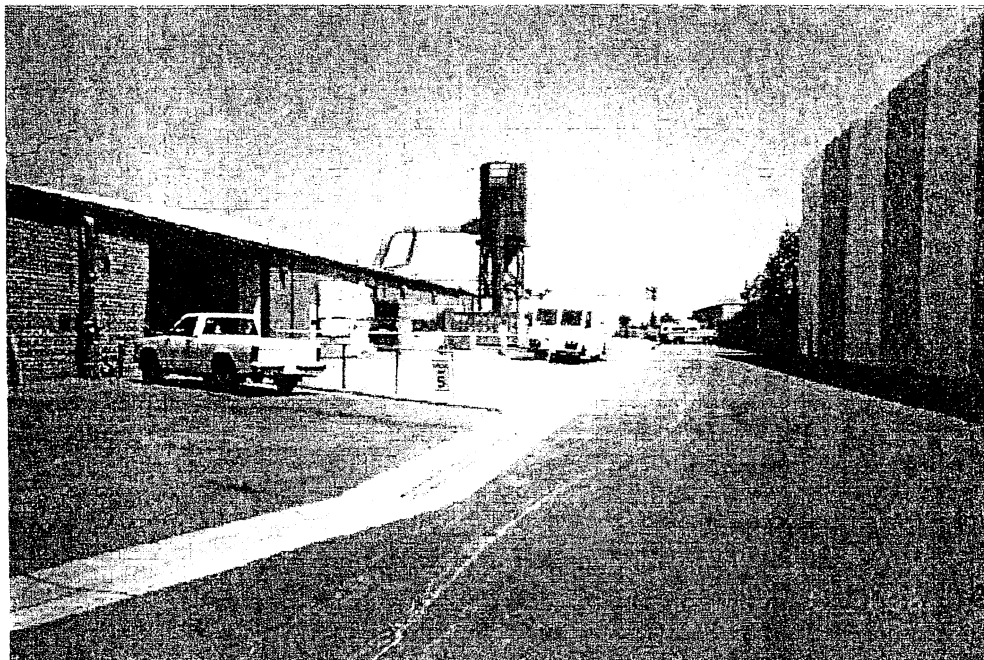
**Photograph 1.** View west at front of subject building from southeast corner of Property.



**Photograph 2.** View north along west side of subject property and adjacent parking lot.

1551 E. Orangethorpe  
Project No. 96-247A





**Photograph 3.** View north along east side of Property and adjacent building.



**Photograph 4.** View of discarded materials, including 5-gallon containers, near northeast corner.

1551 E. Orangethorpe  
Project No. 96-247A



**Photograph 5.** View northeast at storage yard leased to Johnson Controls (northwest quadrant).



**Photograph 6.** View of 55-gallon storage drums positioned along the eastern property boundary.

1551 E. Orangethorpe  
Project No. 96-247A



**Photograph 7.** View of a typical paint booth inside manufacturing area of subject building.



**Photograph 8.** View of paint containers stored inside one room within manufacturing area.

1551 E. Orangethorpe  
Project No. 96-247A

## **APPENDIX C**

### **REFERENCES**

1551 E. Orangethorpe  
Project No. 96-247A

August 12, 1996

OCWD 043102

## APPENDIX C

### REFERENCES

#### Documents

1. BEM Systems, Inc., September 1992, Phase I Environmental Site Assessment and Comprehensive Asbestos Survey, prepared for AMRESKO, Inc.
2. Converse Environmental West, February 10, 1992, Phase I Preliminary Site Assessment, MIC Fullerton, 1501 to 1561 E. Orangethorpe Avenue, Fullerton, California, prepared for Asset Management Resolution Company.
3. Converse Consultants Orange County, January 17, 1994, Update to Phase I Preliminary Site Assessment, 1501 to 1561 E. Orangethorpe Avenue, Fullerton, California, prepared for Prowestern Development Company.
4. Converse Consultants Orange County, January 31, 1994, Chemical Analysis of Liquid in Clarifiers, Fullerton Business Park North, Fullerton, California, prepared for Prowestern Development Company.
5. Converse Consultants Orange County, October 18, 1994, Clarifier Removal and Soil Analysis, Fullerton Business Park North, Fullerton, California, prepared for prepared for Orange County Health Care Agency.
6. Converse Consultants Orange County, February 20, 1995, Addendum - Summary Report of Additional Site Characterization, Fullerton Business Park North, Fullerton, California, prepared for Orange County Health Care Agency.
7. Converse Consultants Orange County, May 18, 1995, Summary Report of Additional Site Characterization, Fullerton Business Park North, Fullerton, California, prepared for Orange County Health Care Agency.
8. Converse Consultants Orange County, December 12, 1995, Soil Remediation Closure Report, Fullerton Business Park North, 1551 E. Orangethorpe Avenue, Fullerton, California, prepared for Orange County Health Care Agency.
9. Orange County Health Care Agency, December 15, 1995, Case Closure, Fullerton Business Park North, 1551 East Orangethorpe Avenue, Fullerton, California, Case #941C29, addressed to Red Eagle Properties, LTD.

10. Regional Water Quality Control Board, Santa Ana Region, December 11, 1995, letter regarding regulatory status of property, Fullerton Business Park, 1551 E. Orangethorpe Avenue, Fullerton, California.

### **Contacts**

11. Henry Ames, Senior Geologist, Converse Consultants Orange County, July 29, 1996, discussion regarding site history, site investigations, corrective action, and regulatory closure.

12. Jo Elliott, Office Manager, Elden Collections, 1551 E. Orangethorpe Avenue, Fullerton, July 29 and August 1, 1996, discussions regarding site access, on-site operations and uses, and acquiring copies of documents.

13. Alan Needle, owner, Elden Collections, 1551 E. Orangethorpe Avenue, Fullerton, July 29 and August 1, 1996, discussions regarding site access, facility history, and acquiring copies of documents.

**APPENDIX D**  
**PERTINENT INFORMATION**

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1551 E. Orangethorpe  
Project No. 96-247A

August 12, 1996

OCWD 043105

## **REGULATORY DATABASE REPORT**

1551 E. Orangethorpe  
Project No. 96-247A

August 12, 1996

OCWD 043106













































































**OTHER DOCUMENTS**

1551 E. Orangethorpe  
Project No. 96-247A

August 12, 1996

OCWD 043140



## PERMIT TO OPERATE

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.  
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner  
or Operator:

COUNTRY AFFAIRE, INC  
1551 E ORANGETHORPE AVE  
FULLERTON, CA 92632

ID 103864

Equipment Location: 1551 E ORANGETHORPE AVE, FULLERTON, CA 92632

Equipment Description:

SPRAY BOOTH NO. 4, FLOOR TYPE, CUSTOM MADE, 8'-0" W. X 10'-0" L. X 8'-0" H., WITH ONE 2 H.P. EXHAUST FAN AND TWELVE EXHAUST FILTERS EACH 20" X 20".

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS SPRAY BOOTH SHALL NOT BE OPERATED UNLESS ALL EXHAUST AIR PASSES THROUGH FILTER MEDIA AT LEAST TWO INCHES THICK.
4. A GAGE SHALL BE INSTALLED TO INDICATE, IN INCHES OF WATER, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE EXHAUST FILTERS. IN OPERATION, THE PRESSURE DIFFERENTIAL SHALL NOT EXCEED 0.25 INCHES OF WATER.
5. THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM DISTRICT PERMITTED EQUIPMENT AT THIS FACILITY SHALL NOT EXCEED 2040 POUNDS IN ANY ONE CALENDER MONTH. THIS MONTHLY LIMIT SUPERSEDES THE 69 POUND-VOC PER DAY LIMIT ON PERMITS D88464, D88465 AND D88466.
6. IN ADDITION TO THE RECORD KEEPING REQUIREMENTS IN AQMD RULE 109, THE OPERATOR SHALL KEEP ADEQUATE RECORDS TO VERIFY THE DAILY USAGE, VOLATILE ORGANIC COMPOUND (VOC) CONTENT AND THE DAILY VOC EMISSIONS FOR EACH

ORIGINAL

OCWD 043141



## PERMIT TO OPERATE

### CONTINUATION OF PERMIT TO OPERATE

COATING AND SOLVENT USED IN THIS EQUIPMENT. SUCH RECORDS SHALL BE RETAINED FOR A PERIOD OF TWO YEARS, AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

7. COATINGS, STAINS, REDUCERS, THINNERS, AND CLEAN-UP SOLVENTS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401, AMENDED DECEMBER 7, 1990.

#### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

*Dorris M. Bailey*

By Dorris M. Bailey/eon  
11/01/1995

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OCWD 043142



## PERMIT TO CONSTRUCT/OPERATE

Page 1

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.  
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner  
or Operator:

COUNTRY AFFAIRE, INC  
1551 E ORANGETHORPE AVE  
FULLERTON, CA 92632

ID 103864

Equipment Location: 1551 E ORANGETHORPE AVE, FULLERTON, CA 92632

Equipment Description:

SPRAY BOOTH NO. 3, BINKS, FLOOR TYPE, 8'-0" W. X 9'-0" L. X 7'-0" H., WITH TWELVE 20" X 20" EXHAUST FILTERS AND ONE 1-1/2 HP EXHAUST FAN.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS SPRAY BOOTH SHALL NOT BE OPERATED UNLESS ALL EXHAUST AIR PASSES THROUGH FILTER MEDIA AT LEAST 2 INCHES THICK.
4. A GAUGE SHALL BE INSTALLED AND MAINTAINED TO INDICATE, IN INCHES OF WATER, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE EXHAUST FILTERS. IN OPERATION, THE PRESSURE DIFFERENTIAL SHALL NOT EXCEED 0.25 INCH OF WATER.
5. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULES 1136 AND 1171.
6. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THIS EQUIPMENT SHALL NOT EXCEED 28 POUNDS IN ANY ONE DAY.
7. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THIS FACILITY SHALL NOT EXCEED 68 POUNDS IN ANY ONE DAY.
8. COATINGS, REDUCERS, THINNERS, AND CLEAN-UP SOLVENTS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401, AS AMENDED DECEMBER 7, 1990.

ORIGINAL

OCWD 043143



## PERMIT TO CONSTRUCT/OPERATE

### CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

9. MATERIAL SAFETY DATA SHEETS FOR ALL COATINGS AND SOLVENTS USED AT THIS FACILITY SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
10. IN ADDITION TO THE RECORD KEEPING REQUIREMENTS IN RULE 109, THE OPERATOR SHALL KEEP ADEQUATE RECORDS FOR THE EQUIPMENT AND FACILITY TO VERIFY DAILY VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS IN POUNDS AND THE VOC CONTENT OF EACH MATERIAL AS APPLIED (INCLUDING WATER AND EXEMPT COMPOUNDS). ALL RECORDS SHALL BE PREPARED IN A FORMAT WHICH IS ACCEPTABLE TO THE DISTRICT, SHALL BE RETAINED ON THE PREMISES FOR AT LEAST TWO YEARS, AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER OR HIS REPRESENTATIVE.

#### NOTICE

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EXECUTIVE OFFICER

By Dorris M. Bailey/lp  
2/14/1995

ORIGINAL



## PERMIT TO CONSTRUCT/OPERATE

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**Legal Owner  
or Operator:**

COUNTRY AFFAIRE, INC  
1551 E ORANGETHORPE AVE  
FULLERTON, CA 92632

ID 103864

**Equipment Location:** 1551 E ORANGETHORPE AVE, FULLERTON, CA 92632

**Equipment Description:**

SPRAY BOOTH NO. 1, BINKS, FLOOR TYPE, 8'-0" W. X 9'-0" L. X 7'-0" H., WITH TWELVE 20" X 20" EXHAUST FILTERS AND ONE 1-1/2 HP EXHAUST FAN.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS SPRAY BOOTH SHALL NOT BE OPERATED UNLESS ALL EXHAUST AIR PASSES THROUGH FILTER MEDIA AT LEAST 2 INCHES THICK.
4. A GAUGE SHALL BE INSTALLED AND MAINTAINED TO INDICATE, IN INCHES OF WATER, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE EXHAUST FILTERS. IN OPERATION, THE PRESSURE DIFFERENTIAL SHALL NOT EXCEED 0.25 INCH OF WATER.
5. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULES 1136 AND 1171.
6. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THIS EQUIPMENT SHALL NOT EXCEED 38 POUNDS IN ANY ONE DAY.
7. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THIS FACILITY SHALL NOT EXCEED 68 POUNDS IN ANY ONE DAY.
8. COATINGS, REDUCERS, THINNERS, AND CLEAN-UP SOLVENTS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401, AS AMENDED DECEMBER 7, 1990.

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OCWD 043145



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 East Copley Drive, Diamond Bar, CA 91765

Permit No.  
D88465  
A/N 299811

Page 2

## PERMIT TO CONSTRUCT/OPERATE

### CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

9. MATERIAL SAFETY DATA SHEETS FOR ALL COATINGS AND SOLVENTS USED AT THIS FACILITY SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
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EXECUTIVE OFFICER

By Dorris M. Bailey/lp  
2/14/1995

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OCWD 043146





## PERMIT TO CONSTRUCT/OPERATE

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.  
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner  
or Operator:

COUNTRY AFFAIRE, INC  
1551 E ORANGETHORPE AVE  
FULLERTON, CA 92632

ID 103864

Equipment Location:

Equipment Description:

SPRAY BOOTH NO. 2  
EXHAUST FILTERS

Post-It™ brand fax transmittal memo 7671		# of pages >	
To	LORA	From	ALAN
Co.		Co.	
Dept.		Phone #	
Fax #		Fax #	

HEIGHT 20" X 20"

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
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7. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THIS FACILITY SHALL NOT EXCEED 68 POUNDS IN ANY ONE DAY.
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OCWD 043147



## PERMIT TO CONSTRUCT/OPERATE

### CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

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EXECUTIVE OFFICER

By Dorris M. Bailey/lp  
2/14/1995

ORIGINAL

OCWD 043148



## PROWESTERN DEVELOPMENT COMPANY

### M E M O R A N D U M

To: Alan Needle

From: Mark Boen *MB*

Re: Fullerton Business Center North

Date: March 14, 1995

Per your request, enclosed please find the following reports:

1. Addendum - Summary Report of Additional Site Characterization - prepared by Converse Consultants - dated 2/20/95
2. Work Plan for Well Installation - prepared by County of Orange - dated 2/17/95
3. Summary Report of Additional Site Characterization - prepared by Converse Consultants - dated 1/26/95
4. Chemical Analysis of Liquid in Clarifier - prepared by Converse Consultants - dated 1/31/94
5. Update to Phase I Preliminary Site Assessment - prepared by Converse Consultants - dated 1/17/94
6. Clarifier removal and Soil Analysis - prepared by Converse Consultants - dated 10/18/94
7. Additional Site Characterization - prepared by County of Orange - dated 12/14/94
8. Summary Report Additional Site Characterization - prepared by Converse Consultants - dated 12/13/94
9. PCE Levels in Soil Samples - prepared by Converse Consultants - dated 12/6/94
10. Site Characterization Summary Report - prepared by Converse Consultants - dated 11/11/94
11. Request For Site Investigation - prepared by County of Orange - dated 11/2/94
12. Phase I Environmental Site Assessment - prepared by BEM Systems - dated 9/30/92
13. Phase I Environmental Site Assessment and Comprehensive Asbestos Survey - prepared by BEM Systems - dated 9/92
14. Asbestos Management Plan - prepared by BEM Systems - dated 8/92
15. Asbestos Inspection Report - prepared by Converse Consultants - dated 4/10/92
16. Phase I Preliminary Site Assessment - prepared by Converse Consultants - dated 2/10/92

Should you need further information, please do not hesitate to contact me.

**CONVERSE CONSULTANTS  
ORANGE COUNTY**



Consulting Engineering  
and Applied Sciences

15245 Alton Parkway, Suite 100  
Irvine, CA 92718-2307

Telephone (714) 453-2880  
Facsimile (714) 453-2888

December 12, 1995

Luis Lodrigueza  
Hazardous Waste Specialist  
Orange County Health Care Agency  
2009 East Edinger  
Santa Ana, CA 92705

**SUBJECT: Soil Remediation Closure Report**  
Fullerton Business Park North  
1551 East Orangethrope Avenue  
Fullerton, California  
OCHCA Case #94IC29  
Converse Project No. 94-42871-05

Dear Mr. Lodrigueza:

Converse Consultants Orange County (Converse), on behalf of Red Eagle Properties, Ltd., is pleased to present this Soil Remediation Closure Report summarizing the compliance soil sampling activities at the above referenced property. These services were performed to verify the effects of the soil remediation work (soil vapor extraction system) conducted at the site between August and November 1995. For Site Vicinity, see Figure No. 1

**BACKGROUND**

Red Eagle Properties, Ltd. purchased the subject site from the Resolution Trust Corporation (RTC) in May 1994. The property was sold by Red Eagle Properties, Ltd. to Elden County Affaire, a furniture manufacturer, in March 1995.

Two on-site clarifiers were discovered during a previous Preliminary Site Assessment of the subject property conducted by Converse in 1992 for Red Eagle Properties, Ltd. The clarifiers were located in the northeast section of the property, on the southeastern side of the existing warehouse. Red Eagle Properties, Ltd. did not occupy the property and never conducted operations that utilized the two clarifiers.

wsl/wpj:871\_clos.12/12

OCWD 043150

The clarifiers were removed in September 1994, prior to ownership or occupancy by Elden County Affaire. Chemical analyses of soil samples collected during the clarifier removals indicated elevated Total Recovery Petroleum Hydrocarbons (TRPH) and Tetrachloroethene (PCE) concentrations in soil adjacent to the southern-most clarifier. Converse recommended further investigation to assess the extent of PCE-impacted soil in the vicinity of this clarifier (Converse, 1994a).

Between October and December, 1994, Converse advanced seven (7) soil probes (BH-1 through BH-7) using a Geoprobe Systems sampling technique. For probe locations, see Figure No. 2. Detectable PCE concentrations were reported in soil samples from each probe location (BH-1, BH-2, BH-3, BH-5, and BH-7) except for locations BH-4 and BH-6. Relatively high PCE concentrations were reported in samples from probes BH-5 (from 84.5 to 96 parts per million) (Converse, 1994b). In January, 1995, Converse advanced nine (9) additional soil probes (BH-4A through BH-6A and BH-8 through BH-13) in the vicinity of the removed clarifier in an attempt to further assess the vertical and lateral extent of PCE-impacted soil and to confirm previous results (Converse, 1995a).

In March 1995, Converse advanced two soil borings BH-14 and BH-15 (hollow-stem auger) with the intent of installing groundwater monitoring wells, based on the assumption that groundwater was approximately 60 feet below ground surface (bgs). Groundwater was not encountered until approximately 115 feet bgs, and approximately 50 feet of non-impacted PCE soil was identified directly above the groundwater table. It was therefore concluded that groundwater had not been impacted by a release of PCE from the former clarifier, and the base of the PCE-impacted soil was defined at about 60 feet bgs. Based on these data, neither of the proposed groundwater monitoring wells were installed (Converse, 1995b).

In summary, relatively high PCE concentrations were reported in soil samples from locations BH-5/BH-5A and BH-8, located west and northwest of the former clarifier. Samples from the remainder of the sample locations contained detectable PCE concentrations, although at relatively lower concentrations than in soil from BH-5/BH-5A and BH-8. The highest reported PCE concentrations in each boring occurred consistently between about 20 and 25 feet bgs, within samples from the silty sand unit. Most of the sample locations reported interspersed detectable and nondetectable PCE concentrations with depth, which has been attributed to the non-uniform subsurface geology. Only five of the ten soil samples collected from a depth of 40 feet bgs reportedly contained detectable PCE concentrations.

As expressed in your letter dated December 14, 1994, the analytical results from the various investigation work has identified levels of PCE that create a public health excess lifetime cancer risk greater than the acceptable  $1 \times 10^{-6}$  level (based on the simplified vapor diffusion model).

**Soil Remediation Closure Report**  
Mr. Luis Lodrigueza  
Orange County Health Care Agency  
Converse Project No. 95-42871-05  
December 12, 1995  
Page 3

In order to reduce the concentration of the previously identified soil contaminants, associated with the former clarifier, Converse operated a soil vapor extraction and treatment system at the site. The soil remedial work was conducted in accordance with the Corrective Action Plan (CAP) dated July 26, 1995 (Converse, 1995c), and which was subsequently approved on July 31, 1995. The remediation system was operational between August 15, 1995 and November 27, 1995.

Converse issued a Soil Remediation System Progress Report, dated October 25, 1995, documenting the effectiveness of the remedial treatment system (Converse, 1995d). Based on the stabilized influent volatile organic compounds (VOCs) data collected during the latter stages of the remediation, Converse shut the remediation system down on November 10, 1995. The subsurface conditions were then allowed to equalize without the influence of the vapor extraction system for 10 days.

On November 20, 1995, Converse restarted the system and collected influent VOC measurements. The collected data indicated that there was not a restart spike in VOC concentration after the 10 day shutdown period; in fact, the VOC concentration continued to decline between November 20 and November 27, 1995, as compared to the November 10, 1995 data. Based on these data, it appeared that the remedial efforts had been successful in reducing the identified soil contaminants as reported in the Soil Remediation System Progress Report and Soil Sampling Work Plan, dated November 29, 1995 (Converse, 1995d and 1995e).

#### **CLOSURE SOIL SAMPLING INVESTIGATION**

The soil sampling work was conducted to verify that remedial activities were successful at the site and that the remaining soil contaminants do not create a public health excess lifetime cancer risk greater than the acceptable  $1 \times 10^{-6}$  level (based on the simplified vapor diffusion model). This work was conducted in accordance with the Soil Sampling Work Plan, dated November 29, 1995 (Converse, 1995e).

On December 1, 1995, Converse advanced three (3) soil probes in the previously identified impacted area using a Geoprobe soil sampling rig. Closure probes SP-1, SP-2, and SP-3 were each located near assessment borings BH-5/BH-5A, BH-8, and BH-9, respectively. Soil samples were collected at five foot intervals from each probe location, up to a total depth between 25 and 40 feet below ground surface. Each soil sample was field screened with an flame ionizing Organic Vapor Analyzer (OVA). The soil probe sampling locations and total depth of each probe are presented on Figure No. 2. For logs of the soil probes SP-1, SP-2, and SP-3, see Appendix A.

Each soil sample was properly sealed, labelled, and stored in an ice-cooled chest and delivered to a State of California, DHS certified laboratory for chemical analyses. Proper chain-of-custody protocol was followed for all samples. Soil samples indicating the highest OVA measurement were selected for analysis and chemically analyzed for VOCs using EPA Test Method 8010.

## CLOSURE SOIL SAMPLING RESULTS

PCE concentrations between 0.3 and 13.7 parts per million (ppm) were detected in soil samples collected from SP-1. PCE concentrations between 6.2 and 25.3 ppm were detected in samples from SP-2, and 1.3 and 16 ppm in two samples from SP-3.

Additionally, lower concentrations of 1,1-Dichloroethene (1,1-DCE), 1,1,1-Trichloroethane (1,1,1-TCA), and Trichloroethene (TCE) were also detected between 20 and 30 feet bgs in samples collected from SP-1, between 15 and 30 feet bgs in samples from SP-2, and in one sample from SP-3. For the laboratory results of the soil samples collected and analyzed in December 1995, see Table 1.

Based on the laboratory results for the soil samples collected from SP-1, PCE concentrations have been significantly reduced by the remediation system from 84.5 to 0.33 ppm (15 feet bgs), from 96 to 12.8 ppm (20 feet bgs), and from 88 to 13.7 ppm (25 feet bgs). Results from SP-2 indicate significant PCE reduction from 32 to 6.2 ppm (15 feet bgs), 26 to 12 ppm (20 feet bgs), 92 to 25.3 ppm (25 feet bgs), and 15 to 10.6 ppm (30 feet bgs). Reduction of detectable PCE concentrations was detected in SP-3 from 18 to 16 ppm (25 feet bgs). For comparison of the soil analytical data collected prior and after the remediation system operation, see Table 1. For soil analytical report from the December 1, 1995 investigation, see Appendix B.

## CONCLUSIONS

Based on the laboratory results of soil samples collected and analyzed from soil probes SP-1, SP-2 and SP-3, significant reduction of PCE concentrations have occurred since the initial site investigations. The Converse soil vapor extraction and treatment system was successful in reduction of the concentrations of the previously identified soil contaminants, associated with the former clarifier. Converse requests that the recent analytical results be evaluated in accordance with the simplified vapor diffusion model to identify if the levels of PCE create a public health excess lifetime cancer risk greater than the acceptable  $1 \times 10^{-6}$  level. If the model results are favorable, Converse, on behalf of Red Eagle Properties, Ltd. requests that site closure be granted and that no further investigation or remediation work be requested for the subject site.

**Soil Remediation Closure Report**

Mr. Luis Lodrigueza

Orange County Health Care Agency

Converse Project No. 95-42871-05

December 12, 1995

Page 5

If you have any questions or require additional information, please contact the undersigned at (714) 453-2880.

Sincerely,

**CONVERSE CONSULTANTS ORANGE COUNTY**

Joseph Radonich  
Project Environmental Scientist

Henry B. Ames, R.G.  
Senior Geologist

JR/HBA/GSS

**Attachments    References**

Table 1: Laboratory Results of Soil Samples

Figure 1: Vicinity Map

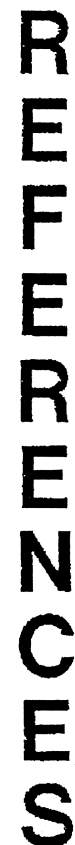
Figure 2: Site Layout Map

Appendix A: Soil Probe Logs

Appendix B: Laboratory Analytical Report

cc:    Carl Ross & Mark Boen, Red Eagle Properties, Ltd.  
         Augustine Anijelo, Santa Ana Regional Water Quality Control Board  
         Mr. Gene Rosecrans, Community Bank  
         Mr. Roger Turner  
         Mr. Alan Needle, Country Affair





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**TABLE 1**  
**Laboratory Results of Soil Samples**  
**Fullerton Business Park North**  
**Fullerton, California**  
**(Converse Project No. 94-42-871-04)**

**EPA Laboratory Method 8010 - Purgeable Halocarbons**

**Results in Parts Per Million**

Sample Depth (feet)	Assessment Boring		Closure Boring SP-1				Assessment Boring	Closure Boring SP-2			Assessment Boring	Closure Boring SP-3		
	BH-5	BH-5A	PCE	1,1-DCE	1,1,1-TCA	TCE	BH-8	PCE	1,1,1-TCA	TCE	BH-9	PCE	1,1,1-TCA	TCE
15	84.5	--	0.33	ND	ND	ND	32	6.2	0.59	1.1	ND	--	--	--
20	96	--	12.8	3.1	0.67	ND	26	12	5.6	3.4	ND	1.3	ND	ND
25	88	--	13.7	0.89	19.6	0.48	92	25.3	6.0	1.0	18	16	12	0.56
30	--	17.5	0.30	ND	0.11	0.078	15	10.6	0.9	1.2	ND	--	--	--
35	--	1.07	--	--	--	--	ND	--	--	--	ND	NS	NS	NS
40	--	0.028	--	--	--	--	ND	NS	NS	NS	ND	NS	NS	NS
Date Sampled	12/94	1/95	12/95				1/95	12/95			1/95	12/95		

**LEGEND:**

PCE = Tetrachloroethene

1,1-DCE = 1,1-Dichloroethene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

parts per million = milligrams per kilogram (mg/kg)

ND = Not Detected above method detection limits

-- = Not Analyzed

NS = No Sample Collected

Note - All other target compounds were not detected. See laboratory analytical report.



# FIGURES



Reference: U.S.G.S Topographic Map, 7.5 Minute Series, Anaheim, California Quadrangle, Dated 1965, (Photorevised 1981).

0 2000 4000  
SCALE IN FEET

## VICINITY MAP

**SITE CHARACTERIZATION**  
1551 East Orangethorpe Avenue  
Fullerton, California

Project No.

94-42871-05



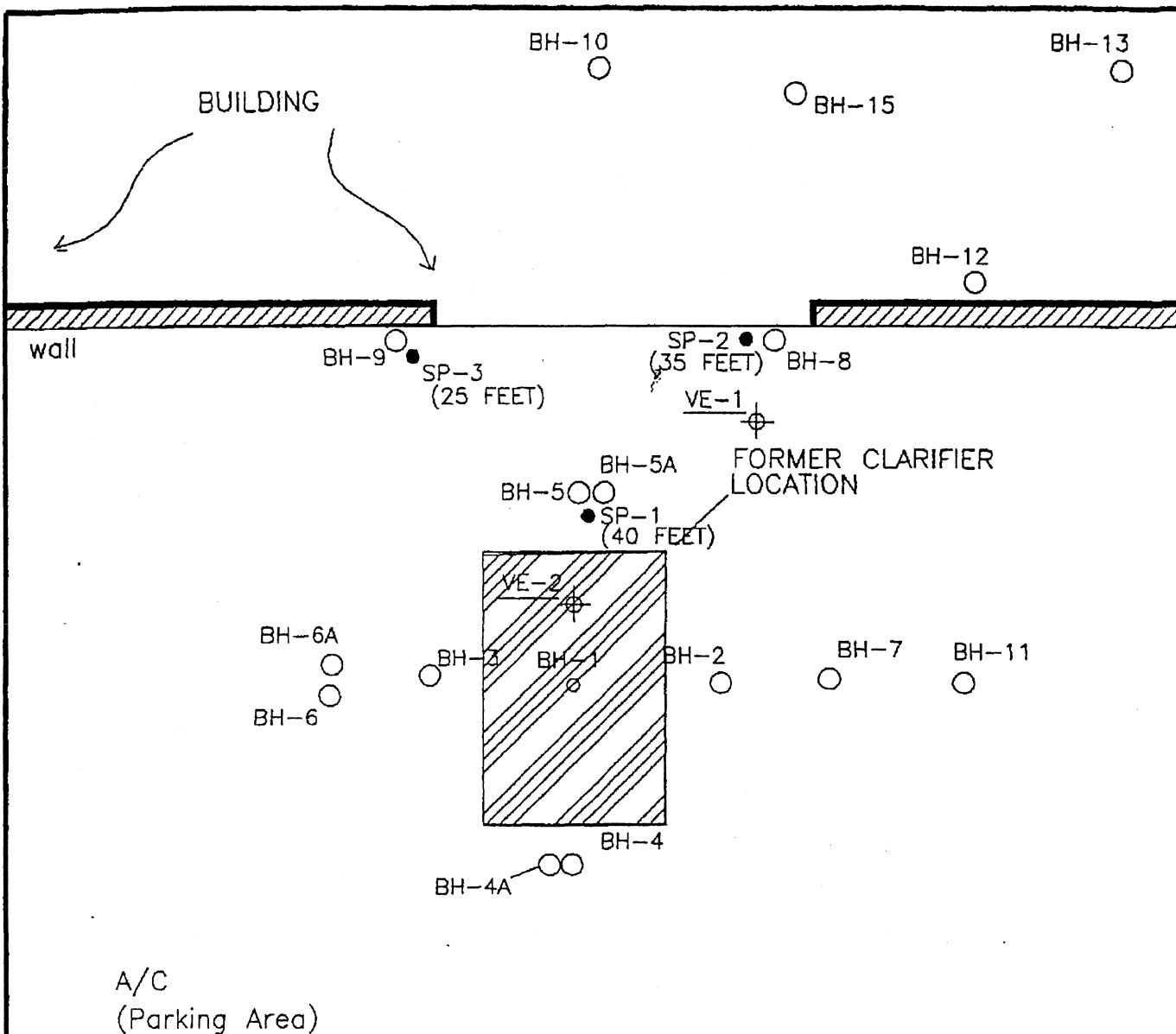
**Converse Consultants**  
Orange County

Geotechnical Engineering  
and Applied Sciences

Figure No.

1

OCWD 043160



# LEGEND


- BH-15 ○ Soil Probe Location (prior to December 1995)
- VE-2 ⊕ Approximate location of vapor extraction well
- SP-3 ● Soil Closure Probe Location, December 1995, (Investigation depth)

○ BH-14

## NOTE:

This figure is part of Converse Consultants Orange County Soil Remediation Closure Report dated December 12, 1995.



 <b>Converse Consultants</b> Orange County Consulting Engineering and Applied Sciences		
<b>SITE LAYOUT MAP</b>		
Fullerton Business Park North 1551 East Orangethorpe Avenue Fullerton, California		
DATE: 12/11/95	PROJECT NO: 94-42871-05	FIGURE NO: 2
SCALE: 1" = 8'	CHECKED BY: <i>KSA</i>	



# APPENDIX A





PROJECT NAME RED EAGLE/FULLERTON CONTRACTOR VIRONEX  
 PROJECT NO. 94-42871-04 DRILLER(S) VIRONEX  
 SITE GEOLOGIST(S) HBA RIG/METHOD GEOPROBE  
 LOGGED BY SSM SCREEN INTERVAL N/A  
 DRLR TD(ft) 41.00 WELL CONST TD(ft) N/A

ELEVATIONS(REL. MSL) LOCATION T3S R10W SEC.35 1/4  
 GRADE LEVEL (ft) N/A CITY FULLERTON CO OR  
 TOP OF CASING (ft) N/A COORDINATES (ft)

RECORD: DATE/TIME GROUNDWATER: DEPTH(ft) DATE/TIME  
 DRLG/CORING 12/1/95 ATD N/A  
 WELL CONST N/A SWL\* N/A  
 WELL DEVELOP N/A SPL\* N/A  
 BACKFILL 12/1/95 (\* PRIOR TO INITIAL DEVELOPMENT)

ENV SAMPLE	PID/OVA READING	DEPTH (ft)	LITHOLOGICAL PROFILE					GRAPHIC LOG	WELL CONSTRUCTION	MOISTURE	SOIL CLASSIFICATION	DESCRIPTION
			Gvl	Scr	Smd	Sfn	Cl					
			Gvl - Gravel > 2.0 mm Scr - Coarse Sand 2.00-0.50 mm Smd - Medium Sand 0.50-0.25 mm Sfn - Fine Sand 0.25-0.062 mm Cl - Clay/Mud									PID/OVA CALIBRATION DATE: <u>12/1/95</u> CALIBRATION UNITS: <u>95 ppm</u> THE PID/OVA SIGNAL (READING) PRODUCED REPRESENTS A QUALITATIVE MEASURE OF IONIZABLE ORGANIC POLLUTANTS. THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTERED.
		0										ASPHALT
1	40	5								sm	SP	SAND: FINE TO MEDIUM GRAINED, LT. BROWN, SOME SILT.
2	5	10								sm	SP	AS ABOVE
3	30	15								sm sm	ML SP	SILT: BROWN, SOME CLAY. SAND: FINE TO MEDIUM GRAINED, LT. BROWN.
4	250	20								sm	SM	SAND w/ SILT: FINE TO MEDIUM GRAINED, BROWN.
		25										

ENV SAMPLE	PID/OVA READING	DEPTH (ft)	Gvl - Gravel > 2.0 mm Scr - Coarse Sand 2.00-0.50 mm Snd - Medium Sand 0.50-0.25 mm Sfn - Fine Sand 0.25-0.062 mm Slt - Silt <0.062 mm Cl - Clay/Mud					GRAPHIC LOG	WELL CONSTRUCTION	MOISTURE	SOIL CLASSIFICATION	DESCRIPTION  OVERALL LITHOLOGY, TEXTURE, COLOR AND, FOR SAND AND GRAVEL SIZE RANGE AND MEDIAN, ANGULARITY/ROUNDNESS, SORTING, ACCESSORY MINERALS AND FOSSILS, % QUARTZ, % FELDSPAR, % LITHIC FRAGMENTS BEDFORMS AND OTHER SEDIMENTARY STRUCTURES.	
			Gvl	Scr	Snd	Sfn	Slt						Cl
5	500	25									SM	SM	SILTY SAND: FINE TO MEDIUM GRAINED, BROWN.
6	25	30									ML	ML	SILT: SOME SAND, BROWN, SOME CLAY.
7	50	35									SM	SM	SAND & SILT: FINE TO MEDIUM GRAINED SAND, LT. BROWN.
8		40									SM	SM	SILTY SAND: FINE TO MEDIUM GRAINED, LT. BROWN.  PROBER'S TOTAL DEPTH = 41.0 FEET BELOW GROUND SURFACE (BGS). NO FREE GROUND WATER ENCOUNTERED BGS. BACKFILLED WITH BENTONITE CHIPS.
		45											
		50											
		55											
		60											
		65											

LOG OF: SP-2

PROJECT NAME RED EAGLE/FULLERTON CONTRACTOR VIRONEX  
 PROJECT NO. 94-42871-04 DRILLER(S) VIRONEX  
 SITE GEOLOGIST(S) HBA RIG/METHOD GEOPROBE  
 LOGGED BY SSM SCREEN INTERVAL N/A  
 DRLR TD(ft) 36.00 WELL CONST TD(ft) N/A

ELEVATIONS(REL. MSL) LOCATION T3S R10W SEC.35 1/4  
 GRADE LEVEL (ft) N/A CITY FULLERTON CO OR  
 TOP OF CASING (ft) N/A COORDINATES (ft)

RECORD: DATE/TIME GROUNDWATER: DEPTH(ft) DATE/TIME  
 DRLG/CORING 12/1/95 ATD N/A  
 WELL CONST N/A SWL\* N/A  
 WELL DEVELOP N/A SPL\* N/A  
 BACKFILL 12/1/95 (\* PRIOR TO INITIAL DEVELOPMENT )

ENV SAMPLE	PID/OVA READING	DEPTH (ft)	LITHOLOGICAL PROFILE						GRAPHIC LOG	WELL CONSTRUCTION	MOISTURE	SOIL CLASSIFICATION	DESCRIPTION
			Gvl	Scr	Smd	Sfn	Slt	Cl					
			Gvl -Gravel > 2.0 mm Scr -Coarse Sand 2.00-0.50 mm Smd -Medium Sand 0.50-0.25 mm Sfn -Fine Sand 0.25-0.062 mm Slt -Silt <0.062 mm Cl -Clay/Mud										PID/OVA CALIBRATION DATE: <u>12/1/95</u> CALIBRATION UNITS: <u>95 ppm</u> THE PID/OVA SIGNAL (READING) PRODUCED REPRESENTS A QUALITATIVE MEASURE OF IONIZABLE ORGANIC POLLUTANTS. THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTERED.
		0											ASPHALT
1	2	5									SM	SP	SAND: FINE TO MEDIUM GRAINED, LT. BROWN, SOME SILT.
2	3	10									SM	SP	AS ABOVE
3	150	15									SM	HL	SANDY SILT: BROWN, SOME CLAY, FINE TO MEDIUM GRAINED SAND.
4	220	20									SM	SH	SILTY SAND: FINE TO MEDIUM GRAINED, BROWN.
		25											

ENV SAMPLE		PID/OVA READING	DEPTH (ft)	Gvl - Gravel > 2.0 mm Scr - Coarse Sand 2.00-0.50 mm Snd - Medium Sand 0.50-0.25 mm Sfn - Fine Sand 0.25-0.062 mm Slt - Silt <0.062 mm Cl - Clay/Mud	GRAPHIC LOG	WELL CONSTRUCTION	MOISTURE	SOIL CLASSIFICATION	DESCRIPTION
5	300	25				SM	SM	AS ABOVE	
6	250	30				M	SM	SAND W/ SILT: FINE TO MEDIUM GRAINED, DRK. BROWN.	
7	250	35				M	ML	SANDY SILT: FINE GRAINED SAND, BROWN.	
		40						PROBER'S TOTAL DEPTH = 36.0 FEET BELOW GROUND SURFACE (BGS). NO FREE GROUND WATER ENCOUNTERED BGS. BACKFILLED WITH BENTONITE CHIPS.	
		45							
		50							
		55							
		60							
		65							



PROJECT NAME RED EAGLE/FULLERTON CONTRACTOR VIRONEX  
 PROJECT NO. 94-42871-04 DRILLER(S) VIRONEX  
 SITE GEOLOGIST(S) HBA RIG/METHOD GEOPROBE  
 LOGGED BY SSM SCREEN INTERVAL N/A  
 DRLR TD(ft) 26.00 WELL CONST TD(ft) N/A

ELEVATIONS(REL. MSL) LOCATION T3S R 10W SEC.35 1/4  
 GRADE LEVEL (ft) N/A CITY FULLERTON CO OR  
 TOP OF CASING (ft) N/A COORDINATES (ft)

RECORD: DATE/TIME GROUNDWATER: DEPTH(ft) DATE/TIME  
 DRLG/CORING 12/1/95 ATD N/A  
 WELL CONST N/A SWL\* N/A  
 WELL DEVELOP N/A SPL\* N/A N/A  
 BACKFILL 12/1/95 (\* PRIOR TO INITIAL DEVELOPMENT )

ENV SAMPLE	PID/OVA READING	DEPTH (ft)	LITHOLOGICAL PROFILE					GRAPHIC LOG	WELL CONSTRUCTION	MOISTURE	SOIL CLASSIFICATION	DESCRIPTION
			Gvl	Scr	Smd	Sfn	Slt					
			Gvl -Gravel > 2.0 mm Scr -Coarse Sand 2.00-0.50 mm Smd -Medium Sand 0.50-0.25 mm Sfn -Fine Sand 0.25-0.062 mm Slt -silt <0.062 mm Cl -Clay/Mud									PID/OVA CALIBRATION DATE: <u>12/1/95</u> CALIBRATION UNITS: <u>95 ppm</u> THE PID/OVA SIGNAL (READING) PRODUCED REPRESENTS A QUALITATIVE MEASURE OF IONIZABLE ORGANIC POLLUTANTS. THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF ACTUAL CONDITIONS ENCOUNTERED.
		0										ASPHALT
1	0	5								sm	SP	SAND: FINE TO MEDIUM GRAINED, LT. BROWN, SOME SILTY.
2	0	10								sm	SP	AS ABOVE
3	50	15								sm	CL	CLAY W/ SILT: DRK. BROWN, SOME SAND.
4	10	20								m	SM	SILTY SAND: FINE TO MEDIUM GRAINED, DRK. BROWN.
		25										



ENV SAMPLE	PID/OVA READING	DEPTH (ft)	LITHOLOGICAL PROFILE					GRAPHIC LOG	WELL CONSTRUCTION	MOISTURE	SOIL CLASSIFICATION	DESCRIPTION
			Gvl	Scr	Smd	Sfn	Slc					
5	320	25										AS ABOVE
		30										PROBER'S TOTAL DEPTH = 26.0 FEET BELOW GROUND SURFACE (BGS). NO FREE GROUND WATER ENCOUNTERED BGS. BACKFILLED WITH BENTONITE CHIPS.
		35										
		40										
		45										
		50										
		55										
		60										
		65										



# APPENDIX B



## ASSOCIATED LABORATORIES

808 North Batavia - Orange, California 92668 - 714/771-8900

FAX 714/538-1209

### CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO H10300-01

REPORTED 12/07/95

### SAMPLE

Soil - SP-1/3'

RECEIVED 12/01/95

### IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

### BASED ON SAMPLE

### PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
Tetrachloroethene	EPA 8010	12/03/95 RR	0.33 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Behare, Ph.D.  
Vice President

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

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# ASSOCIATED LABORATORIES

808 North Batavia - Orange, California 92668 - 714/771-8900

FAX 714/538-1209

## CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO H10300-02  
REPORTED 12/07/95

## SAMPLE

Soil - SP-1/4'

RECEIVED 12/01/95

## IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

## BASED ON SAMPLE

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1-Dichloroethene	EPA 8010	12/03/95 RR	3.1 mg/kg
1,1,1,-Trichloroethane	EPA 8010	12/03/95 RR	0.67 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	12.8 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

Edward S. Behrke, Ph.D.  
Vice President

ESB/gl

NOTE: Unless notified in writing, all samples will be discarded  
by appropriate disposal protocol 30 days from date reported.

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## CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO H10300-03  
REPORTED 12/07/95

## SAMPLE

Soil - SP-1/5'

RECEIVED 12/01/95

## IDENTIFICATION

## BASED ON SAMPLE

Prowestern  
Date Collected 12/01/95  
As Submitted

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1-Dichloroethane	EPA 8010	12/03/95 RR	0.89 mg/kg
1,1,1-Trichloroethane	EPA 8010	12/03/95 RR	19.6 mg/kg
Trichloroethene	EPA 8010	12/03/95 RR	0.48 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	13.7 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

Edward S. Echave, Ph.D.  
Vice President

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded  
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Page 3 of 10

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FAX 714/538-1209

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Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO. H10300-04  
REPORTED 12/07/95

## SAMPLE

Soil - SP-1/6'

RECEIVED 12/01/95

## IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

## BASED ON SAMPLE

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1,1-Trichloroethane	EPA 8010	12/03/95 RR	0.11 mg/kg
Trichloroethene	EPA 8010	12/03/95 RR	0.078 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	0.30 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Benave, Ph.D.  
Vice President

ESB/ql

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### CLIENT

Converse Environmental West (4708)  
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15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO. H10300-05  
REPORTED 12/07/95

### SAMPLE

Soil - SP-2/3'

RECEIVED 12/01/95

### IDENTIFICATION

### BASED ON SAMPLE

Prowestern  
Date Collected 12/01/95  
As Submitted

### PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1,1-Trichloroethane	EPA 8010	12/03/95 RR	0.59 mg/kg
Trichloroethene	EPA 8010	12/03/95 RR	1.1 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	6.2 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Mahase, Ph.D.  
Vice President

ESB/ql

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FAX 714/538-1209

## CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO. H10300-06  
REPORTED 12/07/95

## SAMPLE

Soil - SP-2/4'

RECEIVED 12/01/95

## IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

## BASED ON SAMPLE

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1,1-Trichloroethane	EPA 8010	12/03/95 RR	5.6 mg/kg
Trichloroethene	EPA 8010	12/03/95 RR	3.4 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	12.0 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Behre, Ph.D.  
Vice President

ESB/ql

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TESTING & CONSULTING

Chemical  
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Environmental

C-1 10M

OCWD 043175



# ASSOCIATED LABORATORIES

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FAX 714/538-1209

## CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO H10300-07  
REPORTED 12/07/95

## SAMPLE

Soil - SP-2/5'

RECEIVED 12/01/95

## IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

## BASED ON SAMPLE

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1,1-Trichloroethane	EPA 8010	12/03/95 RR	6.0 mg/kg
Trichloroethene	EPA 8010	12/03/95 RR	1.0 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	25.3 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Benare, Ph.D.  
Vice President

ESB/ql

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Microbiological -  
Environmental -

C-1 10M

OCWD 043176



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## CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO H10300-08  
REPORTED 12/07/95

## SAMPLE

Soil - SP-2/6'

RECEIVED 12/01/95

## IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

## BASED ON SAMPLE

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1,1-Trichloroethane	EPA 8010	12/03/95 RR	0.90 mg/kg
Trichloroethene	EPA 8010	12/03/95 RR	1.2 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	10.6 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Behare, Ph.D.  
Vice President

ESB/ql

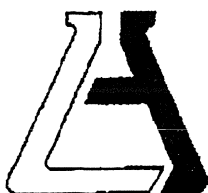
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## CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
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Suite 100  
Irvine, CA 92718

LAB NO. H10300-09  
REPORTED 12/07/95

## SAMPLE

Soil - SP-3/4'

## RECEIVED

12/01/95

## IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

## BASED ON SAMPLE

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
Tetrachloroethene	EPA 8010	12/03/95 RR	1.3 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Bensch, Ph.D.  
Vice President

ESB/ql

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## CLIENT

Converse Environmental West (4708)  
Attn: Henry Ames  
15245 Alton Parkway  
Suite 100  
Irvine, CA 92718

LAB NO. H10300-10  
REPORTED 12/07/95

## SAMPLE

Soil - SP-3/5'

RECEIVED 12/01/95

## IDENTIFICATION

Prowestern  
Date Collected 12/01/95  
As Submitted

## BASED ON SAMPLE

## PURGEABLE HALOCARBONS

<u>Constituent</u>	<u>Method</u>	<u>Date/Analyst</u>	<u>Result</u>
1,1,1-Trichloroethane	EPA 8010	12/03/95 RR	12.0 mg/kg
Trichloroethene	EPA 8010	12/03/95 RR	0.56 mg/kg
Tetrachloroethene	EPA 8010	12/03/95 RR	16.0 mg/kg

All Other Target Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES, by:

  
Edward S. Benare, Ph.D.  
Vice President

ESB/ql

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TESTING & CONSULTING  
Chemical -  
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Environmental -

Client: Converse Environmental West  
Lab No.: H10300-01, 04  
Date: December 07, 1995

<u>PURGEABLE HALOCARBONS-EPA METHOD 8010</u>	<u>LIMITS OF DETECTION</u> <u>(ug/kg)</u>
Chloromethane	0.01
Bromomethane	0.01
Dichlorodifluoromethane	0.01
Vinyl chloride	0.01
Chloroethane	0.01
Methylene chloride	0.01
Trichlorofluoromethane	0.01
1,1-Dichloroethene	0.01
1,1-Dichloroethane	0.01
trans-1,2-Dichloroethene	0.01
Chloroform	0.01
1,2-Dichloroethane	0.01
1,1,1-Trichloroethane	0.01
Carbon tetrachloride	0.01
Bromodichloromethane	0.01
1,2-Dichloropropane	0.01
trans-1,3-Dichloropropene	0.01
Trichloroethene	0.01
Dibromochloromethane	0.01
1,1,2-Trichloroethane	0.01
cis-1,3-Dichloropropene	0.01
2-Chloroethylvinyl ether	0.01
Bromoform	0.01
1,1,2,2-Tetrachloroethane	0.01
Tetrachloroethene	0.01
Chlorobenzene	0.01
1,3-Dichlorobenzene	0.01
1,2-Dichlorobenzene	0.01
1,4-Dichlorobenzene	0.01

Client: Converse Environmental West  
Lab No.: H10300-02, 06, 08  
Date: December 07, 1995

<u>PURGEABLE HALOCARBONS-EPA METHOD 8010</u>	<u>LIMITS OF DETECTION</u> <u>(mg/kg)</u>
Chloromethane	0.2
Bromomethane	0.2
Dichlorodifluoromethane	0.2
Vinyl chloride	0.2
Chloroethane	0.2
Methylene chloride	0.2
Trichlorofluoromethane	0.2
1,1-Dichloroethene	0.2
1,1-Dichloroethane	0.2
trans-1,2-Dichloroethene	0.2
Chloroform	0.2
1,2-Dichloroethane	0.2
1,1,1-Trichloroethane	0.2
Carbon tetrachloride	0.2
Bromodichloromethane	0.2
1,2-Dichloropropane	0.2
trans-1,3-Dichloropropene	0.2
Trichloroethene	0.2
Dibromochloromethane	0.2
1,1,2-Trichloroethane	0.2
cis-1,3-Dichloropropene	0.2
2-Chloroethylvinyl ether	0.2
Bromoform	0.2
1,1,2,2-Tetrachloroethane	0.2
Tetrachloroethene	0.2
Chlorobenzene	0.2
1,3-Dichlorobenzene	0.2
1,2-Dichlorobenzene	0.2
1,4-Dichlorobenzene	0.2



Client: Converse Environmental West  
Lab No.: H10300-03, 05, 09  
Date: December 07, 1995

<u>PURGEABLE HALOCARBONS-EPA METHOD 8010</u>	<u>LIMITS OF DETECTION</u> <u>(mg/kg)</u>
Chloromethane	0.1
Bromomethane	0.1
Dichlorodifluoromethane	0.1
Vinyl chloride	0.1
Chloroethane	0.1
Methylene chloride	0.1
Trichlorofluoromethane	0.1
1,1-Dichloroethene	0.1
1,1-Dichloroethane	0.1
trans-1,2-Dichloroethene	0.1
Chloroform	0.1
1,2-Dichloroethane	0.1
1,1,1-Trichloroethane	0.1
Carbon tetrachloride	0.1
Bromodichloromethane	0.1
1,2-Dichloropropane	0.1
trans-1,3-Dichloropropene	0.1
Trichloroethene	0.1
Dibromochloromethane	0.1
1,1,2-Trichloroethane	0.1
cis-1,3-Dichloropropene	0.1
2-Chloroethylvinyl ether	0.1
Bromoform	0.1
1,1,2,2-Tetrachloroethane	0.1
Tetrachloroethene	0.1
Chlorobenzene	0.1
1,3-Dichlorobenzene	0.1
1,2-Dichlorobenzene	0.1
1,4-Dichlorobenzene	0.1

Client: Converse Environmental West  
Lab No.: H10300-07, 10  
Date: December 07, 1995

<u>PURGEABLE HALOCARBONS-EPA METHOD 8010</u>	<u>LIMITS OF DETECTION</u> <u>(mg/kg)</u>
Chloromethane	0.4
Bromomethane	0.4
Dichlorodifluoromethane	0.4
Vinyl chloride	0.4
Chloroethane	0.4
Methylene chloride	0.4
Trichlorofluoromethane	0.4
1,1-Dichloroethene	0.4
1,1-Dichloroethane	0.4
trans-1,2-Dichloroethene	0.4
Chloroform	0.4
1,2-Dichloroethane	0.4
1,1,1-Trichloroethane	0.4
Carbon tetrachloride	0.4
Bromodichloromethane	0.4
1,2-Dichloropropane	0.4
trans-1,3-Dichloropropene	0.4
Trichloroethene	0.4
Dibromochloromethane	0.4
1,1,2-Trichloroethane	0.4
cis-1,3-Dichloropropene	0.4
2-Chloroethylvinyl ether	0.4
Bromoform	0.4
1,1,2,2-Tetrachloroethane	0.4
Tetrachloroethene	0.4
Chlorobenzene	0.4
1,3-Dichlorobenzene	0.4
1,2-Dichlorobenzene	0.4
1,4-Dichlorobenzene	0.4



# ASSOCIATED LABORATORIES

808 N. Batavia • Orange, CA 92668  
(714) 771-8900 • FAX: (714) 538-1209

## CHAIN OF CUSTODY RECORD

Date 12/1/95 Page 2 of 2

CLIENT <u>Converse Constants</u>	PROJECT MANAGER <u>Henry Ames</u>	Samples Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> County Seals Intact Yes <input type="checkbox"/> No <input type="checkbox"/> Sample Ambient <input type="checkbox"/> Cooled <input type="checkbox"/> Frozen <input type="checkbox"/> Same Day <input checked="" type="checkbox"/> 24 Hr. <input type="checkbox"/> Regular <input type="checkbox"/> 48 Hr. <input checked="" type="checkbox"/>
ADDRESS <u>Trvine, CA</u>	PHONE NUMBER	
PROJECT NAME <u>Prometern</u>	SAMPLERS: (Signature)	

SAMPLE NUMBER	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE			NO. OF CNTNRS	SUSP. CONTAM.	TESTS REQUIRED
				WATER	AIR	SOLID			
SP-2/5	25-25.5 <sup>300ppm</sup> OEPH	12/1/95				✓	1	PCF	X 8010
SP-2/6	30-30.5 <sup>250ppm</sup>								X
SP-2/7	35-35.5 <sup>250ppm</sup>								Hold
SP-3/1	5-5.5								Hold
SP-3/2	10-10.5								Hold
SP-3/3	15-15.5 <sup>50ppm</sup>								Hold
SP-3/4	20-20.5 <sup>10ppm</sup>								X
SP-4/5	25-25.5 <sup>320ppm</sup>								X

Relinquished by: (Signature) <u>Steve Maffulli</u>	2:00pm 12/1/95	Received by: (Signature) <u>[Signature]</u>	Date/Time <u>12/1/95</u>	I hereby authorize the performance of the above indicated work.
Relinquished by: (Signature)		Received by Laboratory for analysis: (Signature) <u>[Signature]</u>	Date/Time <u>12/1/95</u>	

OCWD 043184

**APPENDIX E**

**STATEMENT OF QUALIFICATIONS**

1551 E. Orangethorpe  
Project No. 96-247A

August 12, 1996

**OCWD 043185**

## RESUME

### SUMMARY

Mr. Bryant has more than 22 years of experience in the fields of environmental and geotechnical consulting. His primary career disciplines have included engineering geology, environmental geology, environmental assessment, hydrogeology, environmental engineering, environmental testing and monitoring, and earthwork construction. In more recent years, Mr. Bryant has been in charge of the geologic staff as well as the environmental assessment departments in two different companies. His direct responsibilities have consisted of project management, technical review, business development, personnel training, health and safety, proposal preparation, and contract negotiation.

To date, Mr. Bryant has been directly involved in the preparation and review of over 350 Phase I Environmental Site Assessments (ESAs), and numerous Phase II and III ESAs. He has also been in charge of a variety of contaminant characterization studies and the design of remedial systems for landfills, hazardous waste sites, numerous underground storage tank (UST) facilities, and activities related to industrial chemical spills. Mr. Bryant is experienced in the use of personal computers and application software, such as WordPerfect, QuattroPro, dBaseIII, and Microsoft Works.

Besides his project-related accomplishments, Mr. Bryant is also a technical report reviewer for the Association of Engineering Firms Practicing in the Geosciences (ASPE). He is Chairman of an American Society for Testing and Materials (ASTM) Subcommittee Task Group on site remediation, which is responsible for developing national standards. Mr. Bryant has been a member of a Technical Work Group associated with the County of San Diego, which develops guidelines relative to site assessment and mitigation at hazardous waste sites, primarily UST facilities, throughout the County.

### EDUCATION

University of California at San Diego, B.A. in Chemistry/Earth Sciences, 1972  
University of California at San Diego, Graduate Studies, 1972  
San Diego State University, Graduate Studies, 1973  
University of California at Irvine, Hazardous Materials Management Certificate (in progress)  
40-Hour Hazardous Materials Health & Safety Course, 29 CFR 1910.120, 1989  
8-Hour Annual Refresher Course, 29 CFR 1910.120, 1995

### ORGANIZATIONS

American Quaternary Association  
American Society for Testing and Materials  
Association of Hazardous Materials Professionals  
Association of Engineering Firms Practicing in the Geosciences  
Association of Engineering Geologists  
Earthquake Engineering Research Institute  
Geological Society of America  
Inland Geological Society  
San Diego Association of Geologists  
South Coast Geological Society (past President)

### PROFESSIONAL REGISTRATIONS

California Registered Geologist No. 3569, 1979  
California Certified Engineering Geologist No. 1046, 1979  
Oregon Registered Geologist No. E833, 1981  
Oregon Registered Engineering Geologist No. E833, 1981  
California Registered Environmental Assessor No. 613, 1988

### HONORS

Recipient of the "Joseph S. Ward Award - for Displaying Outstanding Skill and Energy in the Performance of his Duties, and Providing Clearly Diligent and Noteworthy Service to the Firm," awarded by Converse Consultants in 1982.

### REPRESENTATIVE EXPERIENCE

1994-1996: Geoenvironmental Consultant - Mr. Bryant has continued to provide a variety of geoenvironmental services to a select number of clients as a sole proprietorship since May 1994. He has been involved in more than 80 Phase I Environmental Site Assessments during the last one-year period. Technically proficient, timely, and cost-effective consulting services have also been accomplished on Phase II investigations, peer reviews, and UST characterization projects.

1993-1994: Converse Consultants West - Mr. Bryant was Managing Officer, and served as Principal Geologist, of the firm's San Diego office. In this capacity, he was directly responsible for all financial and administrative matters, all personnel, and reviewed all proposals and technical reports issued by the San Diego office. Among his duties, Mr. Bryant coordinated and participated in various business development functions, as well as managed some of the more critical geotechnical and environmental projects. He was directly involved in ESA activities, including training of personnel to conduct environmental assessments, review of assessment reports, resolution of technical issues, and interaction with the various clients (i.e., lenders, property developers, etc.). More than 50 Phase I ESA reports were submitted to clients during this period.

Mr. Bryant has guided the consultant team, including needed subcontractors, through the various (Phase II and III) site assessment activities, particularly on several UST projects. Some of these projects culminated in successful regulatory closure in relatively short periods of time.

1990-1993: M&T AGRA, Inc. (formerly Moore & Taber) - Mr. Bryant served as a Principal Geologist of the firm, and Environmental Services Manager for the San Diego office. In these positions, he performed project management duties on a variety of geotechnical and environmental assignments. These projects ranged from environmental assessments associated with real estate transactions to relatively large geotechnical and environmental activities on multi-million dollar projects, including water and wastewater facilities, bridge and highway corridor projects, and commercial developments, for both the private and public sectors. Specifically, Mr. Bryant planned and supervised the various tasks related to: contaminant and hazardous waste investigations; hydrogeological studies; wetland investigations; landfill siting and design; subsurface testing and monitoring and





## MARK E. BRYANT

### RESUME

Principal

remedial design. He also provided expert witness services on environmental projects in litigation.

1974-1990: Converse Professional Group - Mr. Bryant was employed by Converse Consultants (until 1986) and Converse Environmental West. Before 1986, he served primarily as Project Manager and supervised the geologic staff on numerous types of engineering geology and related projects throughout southern California.

Since 1986, Mr. Bryant had direct responsibility for project development, initial project planning, overall project management, coordination of field exploration and remedial activities, technical data review, and client as well as regulatory agency interaction. In addition to his project management duties at Converse, Mr. Bryant fulfilled the roles of Director of Operations and Health & Safety Officer for the Costa Mesa office from 1988 to 1990. He managed several large subsurface contamination projects, including a 15 acre industrial site where a \$300 Million commercial development was ultimately constructed, groundwater restoration studies, UST programs, site remediation design and construction, and supervised over 100 ESAs involving real estate transactions.

#### PUBLICATIONS

- Bryant, Mark E., 1978, "Green River Golf Course Landslide Complex, Orange and Riverside Counties, California", *Geologic Guidebook to the Santa Ana River Basin*, Southern California, South Coast Geological Society.
- \_\_\_\_\_, 1979, "Landslide Between Long Point and Whites Point on the Southerly Portion of Palos Verdes Peninsula, California", in *Geologic Guide of San Onofre Nuclear Generating Station and Adjacent Regions of Southern California*, Pacific Sections, AAPG, SEPM, and SEG, Guide Book 46.
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